

NOVEMBER 1956 · 50c

# *Ceramics* MONTHLY



HOW-TO  
PROJECTS for the  
HOLIDAYS

LIBRARY  
UNIVERSITY OF IDAHO



Glazing? Banding? Stippling? Fine scroll work?  
Minute detail? Lettering? Tinting? Grounding?  
The answer is **ceramic brushes by Delta**...  
the finest, most complete line of brushes for every medium,  
every technique, every ceramic use. Whether you do tiles  
or pots, figurines or plates, ashtrays or teacups...

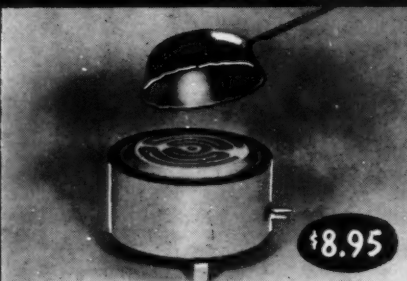
## ceramic brushes by delta

...the indispensable tools your best efforts deserve.

For your copy of "Ceramic Brushes—their selection, use  
and care" by Carol Janeway, send 15¢ in coin or stamps to

**delta** brush mfg. corp.  
119 bleecker street, new york 12, n. y.

## CHRISTMAS SPECIALS FOR CERAMIST & ENAMELIST



**NEW TRINKET SCROLLING KIT**  
An ideal kiln made especially for scroll-  
ing, perfect for enamels, counter enam-  
els too. Special Pyrex reflector top. A  
versatile unit, at only

**\$8.95**

**\$8.95**

### SPEEDY SPURS

The modern way to  
still and stack ware.  
For ceramics and  
enameling. With-  
stands highest temp.  
Sprinkle on shelf,  
always upright, Packed 36 spurs in box

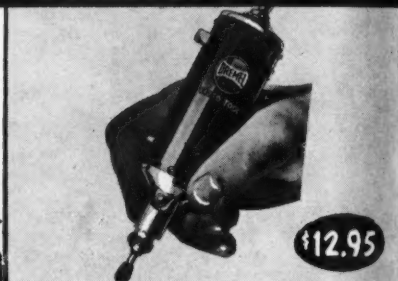


**1.90**

Get NEW supplement with  
our GIANT CATALOG. A hand-  
book of info and supplies, for  
enamelist, ceramist and jewel-  
ry-making. Complete listing of  
NEW BEZEL SETTINGS, get  
your copy today. Valuable  
books only 25¢ for both.



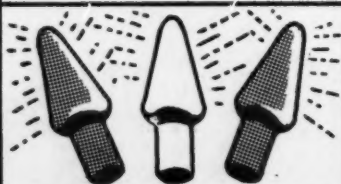
**25¢**



**\$12.95**

**HANDY DREMEL MOTO TOOL**  
Useful to take off excess glaze or enam-  
el. Polish, buff, drill. Every ceramist and  
enamelist needs this terrific tool. Com-  
plete with emery point

**\$12.95**



### CHRISTMAS TREE LITES

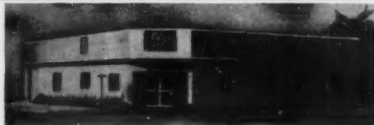
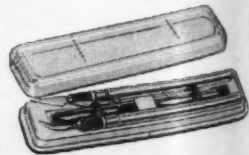
The most beautiful lites ever. Made of  
solid color Lucite. Add color and beauty  
to ceramic trees. Simple to insert any-  
where in tree. Each set contains 15  
lites, 3 each of crystal, green, red,  
blue, yellow. Per set

**\$1.80**

### x-acto — NEW ENGLISH MADE SCRAPER TOOLS

The perfect set of tools for a ceramist and hobbyist.  
Provides full kit of tools for all types of graffiti work  
as well as trimming, modeling and shaping operations.  
Set has 2 metal handles, 6 assorted scraper blades, 2  
cutting knives. NO. 63

**\$2.75**



Our plant is now in Florida. You're welcome  
to stop in and chat while visiting Miami.

**BERGEN  
ARTS & CRAFTS**  
DEPT. CK-300 S.W. 17th Ave.  
MIAMI, FLORIDA

"Imitated But Never Duplicated"

"Beauty by the Brushful"

# 3 UNDERGLAZES ACCLAIMED "BEST"



## WHAT WILL YOU HAVE IN UNDERGLAZES?

Re-Ward's TRU-TONE is known as "the old reliable," always true and sure. World famous VELVET offers two finish possibilities — rich and dull when unglazed, soft and gleaming when matte glazed. And for easy, one-stroke shading, blending and detail work, there's that real joy, SUPER-I-STROKE.

For surest results and a truly "rewarding" experience, use any of Re-Ward's underglazes. They have been proven best in national hobby competition.

Mfrs. of: fabulous décor • velvet • tru-tone • dul-mat • super-i-stroke • magic mender

**Re-Ward**

CERAMIC COLOR MFRS., INC.

1985 FIRESTONE BLVD. LOS ANGELES 1, CALIF.



### NEW RE-WARD DISTRIBUTORS

Buf-El Ceramic Studio  
Ellenville, N. Y.

Clay Den  
213 Fenwick Ave.  
Wilmington, Delaware

Ceramic Land  
1182 Fulton Ave.  
Uniondale, L. I., N. Y.

Skeets Ceramic Studio  
161 Buffalo Ave.  
Brooklyn, N. Y.

Anna Mary's Ceramic Studio  
2528 W. 14th St.  
Indianapolis 22, Indiana



# For Those Special Christmas Ceramics Use . . .

## A BRILLIANT RED GLAZE

MAYCO'S DRAGON RED Fire at cone 06. Highly resistant to burn-out and crazing—and beautiful!

## ATTRACTIVE GREEN GLAZES

MAYCO'S LUSTRE GREEN, JADE & BLUE GREEN The homogenized glazes of tomorrow for perfect ceramics today.

## THE EXOTIC YET PRACTICAL.

WHITE FOAM by MAYCO The new fluffy glaze for many uses. Also Pink, Yellow, Green, Turquoise and Brown.

## NEW: FLAMINGO SATINA\*

A beautiful pink, softly-gleaming, satin finish you'll love to look at, love to touch.

\*Trade Mark applied for

Send 50c for MAYCO'S latest mold catalog. Includes literature on America's finest colors; ONE STROKE, NEW GLAZES, and MAYCO MASK.

# MAYCO COLORS

10645 CHANDLER BLVD., NORTH HOLLYWOOD, CALIF.

now's the time to stock up on

ALL PURPOSE

## KILN WASH

*Excellent for both  
LOW and HIGH fire temperatures*

50 lb. bag . . . . . \$3.50

100 lb. bag . . . . . \$6.00

F. O. B. Plainfield, N. J.

Another fine product of

**Specialized Ceramics Corp.**

Manufacturers of:

WHITEMIX & WONMIX Slips • WONFIRE Glazes  
SPECIALIZED UNDERGLAZES • WONSTROKE dec-  
orating medium

Write for quantity discount price list

**SPECIALIZED CERAMICS CORP.**

200 West Third St., Dept. CM, Plainfield, N. J.



★  
Acclaimed  
Everywhere  
by  
Teachers  
and  
Professionals  
for  
Performance!

★  
This Nationally  
Recognized  
Power-Driven  
Precision Wheel  
only \$57.50  
(Shipped complete,  
Less Motor)

★

Ideal for school, studio, home use . . . The famous B & I Pottery Maker, first in the field, is still first in value and in price! Simple operation, rugged construction, with all the versatility required by professional workers! Many built-in features . . . ADJUSTABLE arm rests; BUILT-IN water container; VARIABLE speed drive; QUIET bronze and babbit bearings; ADJUSTABLE foot-pedal control; UNUSUAL size range.

Before you buy, Write B & I . . . get full, free details: Point-by-point, we challenge comparison on QUALITY features . . . Our price is still the best in the field!

B & I Pottery Maker shipped complete, less motor, f.o.b. factory, Burlington, Wisconsin, for only \$57.50.

**B & I Mfg. Co. Dept. C. Burlington, Mass.**  
"Originators and Makers of famous B & I GEM MAKERS"



# Ceramics MONTHLY

Volume 4, Number 11

NOVEMBER • 1956

50 cents per copy

## in this issue of CM

Letters .....	4
Suggestions from Our Readers .....	6
Itinerary .....	8
A Three-Stem Candelabra by Don Wood .....	13
Leaves through the Seasons by Bee Basch .....	16
Make Your Own Nativity Sets by Muriel Anderson .....	17
Bells are What You Make Them by Reinhold P. Marxhausen .....	18
Underglaze: Backgrounds demonstrated by Marc Bellaire .....	20
Strictly Stoneware by F. Carlton Ball .....	22
Thin Slabs of Clay Make Decorations by John Imhoff .....	23
Ornaments with a Delicate Air .....	25
Plaques to Personalize Christmas Gifts by Jo Robert .....	26
Answers to Questions conducted by Ken Smith .....	29
Overglazes: Color & Values (Part 2) by Zena Holst .....	31
Enamellers Column by Kathie Berl .....	33
Ceram-Activities .....	35
Advertisers Index .....	37

Editor Louis G. Farber  
 Business Manager Spencer L. Davis  
 Associate Editors Mary Elliott  
 Jane Wertz  
 Editorial Associate Thomas Sellers  
 Art Director Robert L. Creager

Advisors and Special Contributors: Carlton Atherton; F. Carlton Ball; Kathie Berl; Edris Eckhardt; John Kenny; Zena Holst; Dorothy Perkins; Jo Robert; Ken Smith; Vera Walkup; Don Wood

Cover by Robert L. Creager

Ceramics Monthly is published each month at the Lawhead Press, Inc., Athens, Ohio, by Professional Publications, Inc., S. L. Davis, Pres. and Treas.; L. G. Farber, V. Pres.; P. S. Emery, Secy.

SUBSCRIPTION PRICE in U.S.A. and Possessions: one year, \$4; two years, \$7; three years, \$9. Canada and Pan Am. add 50 cents a year; foreign, add \$1 a year. Current issues, 50c; back issues, 60c.

ALL CORRESPONDENCE (advertising, subscriptions, editorial) should be sent to the editorial offices at 4176 N. High St., Columbus 14, Ohio. Entered as second-class matter at the post office at Athens, Ohio, as granted under Authority of the Act of March 3, 1879.

Copyright 1956 by Professional Publications, Inc. All rights reserved.

## METAL ENAMELING...

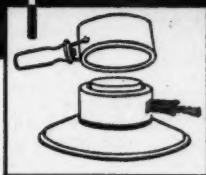
Get Kiln—Enamels—  
 Illustrated Text—  
 from THOMPSON!

THOMPSON ENAMELS ARE BEST FOR:

- Brilliance
- Smoothness
- Dependability
- Proper grain size
- Controlled fusing temperature

Used everywhere by:

Schools—Hobbyists—Enamel Artists  
 —Army & Navy—Hospitals  
 —Commercial Enamellers



### Low-Cost KILN

The ideal Kiln for beginner and professional. Will fire any piece up to 4 3/8" in diameter and 1 1/2" high. Elements easily replaceable at nominal cost.

Perfect for Use in Schools

- Reaches Enameling Temperatures Quickly
- Sturdy, Simple Construction
- Low-Cost, Trouble-free Operation

## FREE TEXT

### ON ENAMELING

by Thomas E. Thompson.  
 Send for your copy of this 40 page illustrated text on metal enameling. Techniques — tools — equipment — types of enameling — firing — finishes, etc.



NEW

Silver plated metal—no pre-cleaning—no formation of oxide scale—costs little more than copper.

NEW

Complete line of Opalescent colors—beautiful effects—write for sample.

Write Dept. CM for Complete Information



Thomas C. Thompson Co.

1539 Deerfield Road, Highland Park, Ill.

UNIVERSITY OF ILLINOIS

# Letters

HI-LO

Dear Editor:

I feel impelled to write you to tell you how very much I enjoyed Carlton Ball's [first] article on Stoneware. Am looking forward to more. Although we stoneware (and porcelain) devotees may be in the minority, we relish advice on problems peculiar to high-fire work.

The only unpleasant note was the deflation I felt to learn that Mr. Ball doesn't believe stoneware, being much more difficult to handle, should "rate" more at shows. I think the craftsman who can accomplish work in stoneware certainly has risen to heights of accomplishment that no low-fire craftsman can . . .

HILDA A. WHEATLEY  
W. Hempstead, N. Y.

THROWING BOOK?

Dear Editor:

I have enjoyed the Tom Sellers articles on throwing for some time. I find each article helpful . . . I have had to make a [card index to help locate articles]. This is a time saver . . . but it would be so much better if you were to put all of the articles in a book similar to the one you have on copper enameling.

Have you been contemplating such a book? If not, why not? . . .

A. J. SPENCER  
St. Petersburg, Fla.

♦ We have been contemplating.—Ed.

CHOP THE TAILS

Dear Editor:

. . . I have one small suggestion . . . It would be a great help if each article was continued "on the following page" instead of further back in the book. [If it is to lead us to the ads], I think you will find that most of us read every word of every ad anyway.

CHARLOTTE HUNTER  
Grass Valley, Calif.

♦ "Tails" on articles come from the art (not the advertising) department. We avoid them whenever possible.—Ed.

. . . LOVES ME NOT

Dear Editor:

Of course there is still some good in CM but it seems that it is rapidly degenerating into a happy hunting ground of "advertisers and hobbyists" who are eager to try anything without having to pay for the basic knowledge. Ceramics is a fine profession and will survive regardless of "Barnum and Bailey" novelties, no matter who publishes them. Sorry—but [no renewal on] my subscription.

J. J. MAREK  
Brownsburg, Ind.

PROBE!

Dear Editor:

I have been a subscriber to CM since its start. I welcomed it as a guide and inspiration for my students. Now it seems to have turned into a magazine for hobbyists alone . . .

Why doesn't CM take up its responsibility of building U. S. ceramic standards; of raising craft ideals. Why not at least one article a month to inspire individual

creation above the child's level; to encourage honest work; to develop understanding for the fine ceramic artists of our time . . .

Come on, CM. Probe the Depths. The surface scratches are not enough.

GENEVIEVE KARR HAMILTON  
Oneonta, New York

MORALE BOOSTERS

Dear Editor:

. . . CM is so very frank and honest in all its articles; those who write explain everything so clearly! There isn't any hokus-pokus about it.

When I started playing with clay and paints fourteen years ago, the instructors would not explain very much, and I ruined a lot of my work—so much so, that I was determined to learn all I could and to help others. Now, the best way to do this is to recommend your magazine . . .

NINA L. EVANS  
San Luis Obispo, Calif.

Dear Editor:

. . . Have heard many studio operators remark about the high quality of information held between the covers. Start my subscription . . .

KAY GRIGSBY  
Village Ceramic Studio  
Florence, Mass.

Dear Editor:

. . . May I say that now I am enjoying your magazine very much. At first I thought it was going to be beyond me.

We all like to learn and climb, too. I am sure some day I will refer to the first issues and find much material that I will be able to use.

CARRIE F. CRABTREE  
S. San Gabriel, Calif.

Qualified Teachers Say...

**IT'S EASY TO USE**

**Ceramichrome®**

Underglazes—School & Exotic Glazes

Ceramichrome colors are the solution to promoting a more balanced and successful art program—they are ready-to-use, are intermixable, water soluble, non-toxic and can be one-fired!

Write for **FREE Literature**

**Ceramichrome Laboratories**

2111 W. Shannon Ave.  
Los Angeles 47, Calif.

# THE FINEST, SAFEST KILNS ON THE MARKET

**dynaKILN**  
THE TROUBLE-FREE METHOD

All our kilns have **PRODUCTS LIABILITY INSURANCE** by The Indemnity Insurance Company, subsidiary of The Insurance Company of North America. (Another L and L exclusive).



## UL APPROVED FOR YOUR PROTECTION

Ask your local Electric Company or Fire Insurance Company about the importance of UL approval on any electric appliance. Others claim that wire and switches are UL approved, but their kilns are not!

### TOP LOADERS

20 quality built, feature packed models from which to choose. DYNAKILNS feature the patented DYNA-GLOW porcelain element holders . . . 4-way switches . . . 2 peep holes . . . pilot lights . . . and they are designed with your safety in mind.

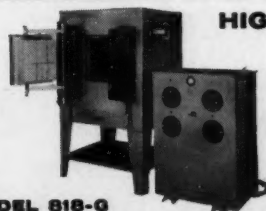


MODEL U15H

### FRONT LOADERS

A complete line of bench and floor models available.

MODEL 424



MODEL 818-G

### HIGH TEMPERATURE FURNACES TO 3000° F

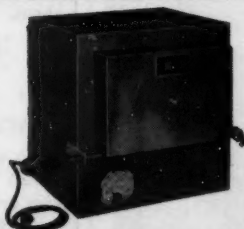
. . . using silicon carbide heating elements

### ENAMELING KILNS

**TEMPERATURE HOLDING ENAMELING KILN**  
**Can Also Do Ceramics!**

**\$74<sup>80</sup>**

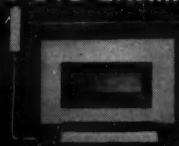
plus \$2.00 crating charge.  
Chamber size: 4" x 8½" x 8½"



Price includes Pyrometer, Input Control Switch, Gravity Door, Pilot Light, and Patented Dyna-Glow Porcelain Element Holders. Attractive . . . Plugs in anywhere!

MODEL E49

### MODEL E48 ENAMELING KILN



All steel welded case . . . gravity door . . . Patented Dyna-Glow element holders . . . Plugs in anywhere . . . attains enameling temperatures quickly regardless of voltage conditions . . . elements can not be burned out due to over-firing.

**\$25<sup>00</sup>**

no crating charge.  
Chamber size:  
4" x 8" x 8"

\*Pyrometer available at \$20.00 extra

**L & L**

**MANUFACTURING COMPANY**  
CHESTER 11, PENNA.

**DEALER INQUIRIES INVITED**



for a  
beautiful  
uniform  
finish . . .

use HARROP's  
easy to apply  
Brush-on  
GLAZE

New . . . ready mixed, brush-on glaze specially compounded by HARROP for smooth, quick application. Over 80 modern, decorative colors in the full range of opaque, transparent, semi-mat, crackle and fancy art finishes. All types fire at cone 06 . . . flow well . . . produce a beautiful uniform finish.

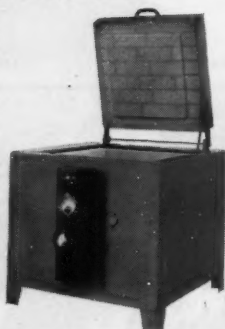


**MAKE HARROP  
YOUR ONE RELIABLE  
SOURCE FOR ALL CERAMIC NEEDS**

Colors, finishes, clays and plasters. Modelling tools, kiln furniture and supplies, painting and air-brush equipment. Send for catalog.

**Efficient . . .  
Economical ELECTRIKILNS**

Save time . . . make your firing fast . . . easy . . . accurate . . . with a Harrop Electric Kiln designed to the needs of the hobbyist, teacher or art studio. Scientific design and low-input heating elements provide uniform firing and economical operation. SIZES TO MEET ANY NEED . . . Top Loader or Side Loader in bench or floor models. Capacities to 4860 cu. in., maximum firing 2300°. Mail coupon for catalog.



CLIP AND MAIL TO . . .

**Harrop Ceramic Service Co.**

ELECTRIKILN DIVISION  
3470 E. 5th Ave. Columbus 3, Ohio

Please send me your complete catalog of ElectriKilns and Ceramic Supplies.

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

I am a Hobbyist ☐, Art Studio Owner ☐,  
Public School Teacher ☐, Private Class  
Teacher ☐, Occupational Therapist ☐.

# Suggestions

from our readers

## SLAB-ROLLING IDEA

To get even thickness when rolling out a slab of clay, the procedure is to guide the roller on two sticks; the clay will then be rolled to the same thickness as the sticks. If you want

mounded up slightly above the plate level. The plate was bisque fired again; then the surface along the cracks was smoothed with an emery board.

After glazing and refiring, the crack is invisible and the platter rings as clear as a bell.

—Lillian Hansen  
Glendale, Calif.



to be able to roll clay to different thicknesses try this idea.

I keep on hand a half dozen or more twelve-inch rulers. For a thin slab of clay I use one ruler on each side; for a thicker slab, two rulers; three rulers or more for heavy pieces; etc.

This is a more convenient procedure than using scraps of wood which have the habit of disappearing or at least making it difficult to find mates when you want them.

—Muriel Bigford  
Mallorytown,  
Ontario, Canada

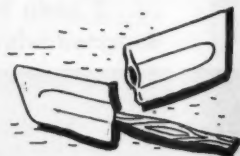
## CRACK REPAIRER

A fourteen-inch platter which was cast in cone 04 slip cracked during the bisque firing. Rather than throw the piece away, I experimented with a repair idea and it worked perfectly.

I bisque fired a small amount of fine green-ware scrapings and then screened it through an 80-mesh screen. Sodium silicate was added to make this into a paste. The crack was thoroughly wetted and the mixture was forced in and

## PLATE SCRAPER USES

A handy tool for the ceramic studio is the rubber plate scraper sold at household supply counters in department or hardware stores. It is excellent for cleaning out mortars, scraping wedging boards, stir-



ring clay and glaze through a sieve as well as "draining" jars and bottles clean. If you take out the handle it makes an excellent rubber rib for use in throwing.

—Bim and Doris Neuman  
North Babylon, N.Y.

## RUST PREVENTER

Have you ever been annoyed when you opened a jar of glaze to find that the lid had rusted and specks had dropped into the glaze?

An easy way to prevent this is to cover the jar with a small square of vinyl plastic (of the type used in the kitchen for tablecloths, food bags, etc.) extending it down beyond the threads, then screwing on the lid. In this way moisture cannot attack and cause rust.

—Peg Townsend  
Tucson, Ariz.

(Please turn to page 10)

## Dollars for your Thoughts

CM pays \$1 to \$5 for each item used in this column. Send your bright ideas to Ceramics Monthly, 4175 N. High St., Columbus 14, Ohio. Sorry, but we can't acknowledge or return unused items.

CERAMICS MONTHLY

FROM A TO Z  
AND EVERYWHERE IN BETWEEN

YOU WILL FIND  
EVERY THING  
YOU NEED  
AT

**HOUSE OF CERAMICS**

3295 JACKSON MEMPHIS, TENN.

We  
Carry the  
Nation's Largest  
and Most Complete  
Stock of Hobby Ceramic  
Supplies and Equipment

Big 60-Page Illustrated Catalog 50c  
Deductible on First Order \$5.00 or More.

### A most unusual Candlestick Holder . . .



THE  
HOLLY  
BOW

Mold No. 59—only \$6.25 each.

Each candlestick holds two candles. Use several together to decorate your holiday table!

All molds (c) Bee, FOB Rumson, N.J.  
Add 10% for packing, 50c minimum. No COD's, please

Send for our  
NEW, FREE  
CATALOG today!

**Bee Bach Designs**  
70 Oak Tree Lane, Rumson, N.J.

## Voted the finest . . .



## Duncan's LIQUID TRANSLUCENT UNDERGLAZE COLORS

Tested and Manufactured to the  
requirements furnished by  
30 leading Ceramists

Here is a product which is the result of months of written questionnaires, surveys, sample testing and suggestions from leading ceramists all over the nation.

All the famous Duncan Quality and E-Z application combines with the most rigid specifications to give YOU a LIQUID translucent underglaze in colors and vehicle of a quality never before achieved.

24 Sparkling ONE-STROKE shades that can be brushed, sprayed, airbrushed, stippled or spattered. Good for fine detail work, China painting technique on greenware or bisque.

Ask for them at your dealers or distributors. See them demonstrated at the ceramic shows.

½ oz. jar **45c**

### Cerami-certified COLORS

Old Rose	Mahogany Brown	Dark Turquoise
Cinderella Pink	French Brown	Chartreuse
Irish Green	Sienna Brown	Smoke Grey
Willow Yellow	Jet Black	Mulberry
Sierra Yellow	White	Dark Orchid
Forget-me-not Blue	Jade Green	Flesh Tone
Royal Purple	Pansy Purple	Midnight Blue
Ruby Red	Grass Green	Royal Blue Green

There's a Duncan Distributor near you  
Write us for his address.

**Duncan**

CERAMIC PRODUCTS, INC.

4030-F North Blackstone

Fresno, Calif.

# VIEW of AMACO'S

5 New Models  
High Fire  
Electric  
**KILNS**

**New  
CERAMIC  
CATALOG**  
No. 43

**STONE-  
WARE  
and other  
GLAZES**

**VERSA  
COLOR**

A versatile tube  
paint especially  
for silk screen  
printing

**New  
Liquid  
SELF-  
GLAZING  
COLORS**

Send for  
your free copy  
of this 52 page  
Amaco Ceramic  
Catalog No. 43

**NOW!**

AMERICAN ART CLAY COMPANY  
4719 WEST SIXTEENTH STREET  
INDIANAPOLIS 24, INDIANA

## Itinerary

Send show announcements early — Where to Show: three months ahead of entry date; Where to Go: at least six weeks before opening.

### WHERE TO SHOW

#### OHIO, Youngstown

January 1-27

Ninth Annual Ceramic and Sculpture Show at The Butler Institute of American Art. Residents and former residents of Ohio eligible. Jury; \$750 purchase prizes. Entry fee, \$2; work due Dec. 16.

### WHERE TO GO

#### CANADA, New Brunswick, Saint John

November 9-30

Dutch Arts and Crafts (contemporary) at The New Brunswick Museum.

#### FLORIDA, West Palm Beach

November 15-25

Florida Craftsmen's 6th Annual State Craft Show at Norton Gallery & School of Art, Pioneer Park.

#### IOWA, Cherokee

through November

Chinese Porcelain, a traveling AFA. exhibit, at Sanford Art Museum.

#### IOWA, Sioux City

November 26-December 24

Art for Giving Show, the work of area craftsmen, at Sioux City Art Center.

#### KANSAS, Lawrence

through November 16

Kansas Designer Craftsman Show at University of Kansas, Union Bldg.

#### NEW JERSEY, Red Bank

November 13-17

Navesink River Ceramic Guild annual show at the China and Glass Shop, Broad St. Also demonstrations of techniques.

#### NEW YORK, Hempstead

November 6-11

Long Island Ceramic-Art and Handicraft Show at Hempstead Armory. Supplies and equipment for hobbyists and ceramists to be exhibited and sold.

#### NEW YORK, New York

November 15-December 31

Young Americans 1956 Exhibition at Museum of Contemporary Crafts, 29 W. 53 St. Craftsmen 30 years of age and under participating.

#### NEW YORK, Rochester

November 9-December 2

Second Exhibition of American Jewelry and Related Objects (sponsored by the Hickok Co.) at The Rochester Memorial Art Gallery.

#### NEW YORK, Syracuse

November 4-December 2

19th Ceramic National (2nd Biennial) at Syracuse Museum of Fine Arts.

#### NEW YORK, White Plains

November 12-19

Westchester Arts & Crafts Guild Annual Exhibit, at County Center.

#### NORTH CAROLINA, Charlotte

November 11-December 3

American Craftsmen (contemporary) at The Mint Museum of Art.

#### NORTH CAROLINA, Greensboro

November 4-25

New England Crafts (contemporary) at University of North Carolina, Women's College.

#### OHIO, Massillon

through November

21st Annual November Show of work in all mediums. At Massillon Museum.

#### OHIO, Youngstown

November 4-December 16

Autumn Annual for Area Artists at Butler Institute of American Art. Includes ceramics and other crafts.

#### OREGON, Portland

November 16-December 14

Design in Scandinavia—over 700 mass-produced pieces — at Portland Art Museum.

#### PENNSYLVANIA, Philadelphia

November & December

Christmas Crafts Exhibition at Philadelphia Art Alliance.

#### PENNSYLVANIA, Philadelphia

November 4-25

Pennsylvania Guild of Craftsmen members' show at Woodmere Art Gallery.

#### SOUTH CAROLINA, Columbia

November 4-25

American Jewelry and Related Objects (contemporary) at Columbia Museum of Art.

#### TEXAS, Lubbock

November 4-25

Italian Arts and Crafts at Texas Technological College Museum.

#### TEXAS, San Antonio

November 4-25

5th Texas State Crafts Exhibition, sponsored by Craft Guild of San Antonio, at Witte Memorial Museum. (At Dallas Museum of Fine Arts in December).

#### WASHINGTON, D. C.

December 2-January 20

11th Annual Area Exhibit at Corcoran Gallery of Art.

#### WISCONSIN, Milwaukee

through November 29

36th Annual Exhibition of Crafts sponsored by Wisconsin Designer-Craftsmen and Milwaukee Art Institute.





## NEW

As demonstrated  
at the shows

by

**HERMAN KLEINER**

**Superior Matt Glazes in  
18 Decorator Colors**

Get distinctive Stoneware  
Effects • One or Two Fire  
• Intermixable • Beautiful  
results • All at Cone 06

For a Professional Touch  
Be Sure To Use

# CREEK-TURN

## MODERN MATT GLAZES and UNDERTONERS

### VISIT OUR NEW DISTRIBUTORS

Florence Cox, 543 Boulevard, Kenilworth,  
N.J.

Edith's Ceramic Nook, 206 S. Audubon  
Road, Indianapolis, Indiana.

Lucille Gerbig, 4023 Reading Road, Cin-  
cinnati, Ohio.

Thirza's Ceramics, 1616 Court Street,  
Saginaw, Michigan.

Distributorships Available  
New MOLD and GLAZE Catalog \$1.00  
—refunded on first order

**CREEK-TURN** Route #38  
Hainesport, N.J.



# Results are better

with

## CLAYS AND GLAZES THAT GO TOGETHER!

**DRAKENFELD** clays and glazes are made for each other — are the right combination for better ware. Here are a few suggestions. Give them a trial and convince yourself.

### CLAYS

#### CONE 06 White Casting Clay 68203

... just add water and adjust to proper consistency. The slip improves with age.

#### CONE 06 White Plastic Clay 68204

... comes in moist form, ready to use for modeling or throwing on a wheel.

### GLAZES

Cone 06-04 Gloss (Majolica)

Cone 06-02 Vellum Matt

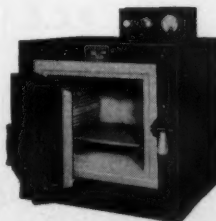
Cone 06-02 Matt

Cone 07-02 Crystalline

Cone 07-02 Crackle

Cone 07-02 Fancy Art

These glazes produce sparkling results — are available in a wide variety of colors. All are specially designed for Cone 06 fire — danger of crazing, shivering, blistering, pinholing and crawling is greatly minimized.



**OWN AN ELECTRIC KILN.** Enjoy the thrilling experience of firing your own ware. Drakenfeld has a full line of electric kilns—floor and bench models—front loaders and top loaders—from which to choose one best-suited to your needs.

### WRITE FOR FREE CATALOG No. 50-A

Contains complete information and prices on clay bodies, prepared glazes, overglaze and underglaze colors, pyrometric cones, banding wheels, laboratory mills, electric kilns and potter's wheels.



# GRITCLOTH

The Miracle Sanding Fabric  
for the  
**CERAMIC  
CRAFTSMAN**



SMOOTHES AND  
RECONDITIONS  
MOLDS



● GRITCLOTH, the original  
open-mesh sanding material,  
replaces bulky tools,  
sandpaper and sponges.

● Now packaged conveniently  
for the Ceramic  
Hobbyist, with instructions  
for using.

● Send for complete assorted package. \$1.00, post paid.

Write for  
Quantity Prices



Packaged exclusively for the ceramic trade by:

**WALMER'S CERAMICS**  
3729 ELDER ROAD, HARRISBURG, PENN.



from one Source . . .  
for one Quality Index



## Orton standard pyrometric Cones

Orton provides a complete cone service. No matter what your firing operation is, there is an Orton cone to meet your needs.

Large Cones are made in Cone Numbers from 022 to 42 inclusive. P.C.E. Cones are available in Cone Numbers 12 to 42 inclusive. Small cones are made in Cone Number 021 to 12 inclusive. Cone Numbers 31½ and 32½ are available in the Large and P.C.E. Cone series. Cone Numbers 21, 22, 24 and 25 are not produced.

Large cones Numbers 010 to 3, made of an iron-free composition are available upon request. Such cones are suitable when reducing conditions are used in the last stages of firing.

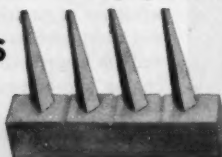
Plaques for both large and small cones are made in compositions for both ordinary temperature ranges and very high temperatures.

Molds for making test cones for the P.C.E. test are also available.

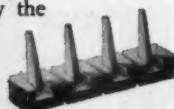
Write today for the free 56-page booklet "The Properties and Uses of Pyrometric Cones," and the new Temperature Equivalent Table prepared by the Foundation.

### PLAQUES

LARGE CONES



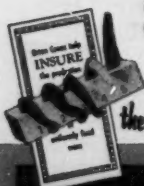
SMALL CONES



For export orders contact the Ferro Corporation, 4150 East 56th Street, Cleveland, Ohio, or the Foundation.

The accepted standard  
for over 60 years

the fireproof insurance of thousands



The Edward **ORTON** Jr. Ceramic  
FOUNDATION

1445 SUMMIT STREET

COLUMBUS 1, OHIO

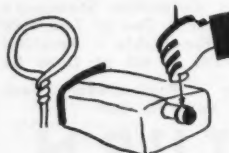
## Suggestions from Our Readers

(Continued from page 6)

### COIL MAKER

Here is a simple way to make coils to be used for coil building or for handles for cups or mugs.

Twist a loop at the end of a piece of stiff wire. Pull



this loop through a piece of well-wedged and rather stiff clay just below the surface of the clay. If the clay is at the right consistency a coil will follow along behind the wire!

—Ruth Meehan  
N. Burnaby, Canada

### SEE GOLD ON BLACK!

When you paint gold accents on a black-glazed piece you learn very quickly that the gold, which is quite dark when it goes on, completely disappears on the black background; it is impossible to see where you have been or where you are going. To overcome the difficulty, I use the following procedure and it works quite well for me.

I sketch in the design using either white china-marking pencil or white carbon paper. The design is made slightly larger than required and the gold is then painted in almost to the white line. Although you still can't actually see the gold, you paint one small area at a time and the white outlines keep you posted on your progress.

—Vera Crockatt  
Mercedes, Texas

### BUTTON MOLD

When I needed a mold for small button blanks I decided to try making my own.



I purchased a card of "Domes of Silence" in the hardware store to use as the models. These items are ordinarily used on the bottoms of chair legs and they come in several sizes.

I pressed a thin slab of clay in the bottom of a small box, stuck in the Domes, prongs down, and poured plaster over them until they were well covered with an inch or more to spare. Now I have a fine mold which casts eight buttons at a time.

—Dorothy D. Freas  
Westfield, N.J.

### GLAZE SAVER

To catch overspray in your spray booth, drape a sheet of plastic behind and underneath the object being sprayed. The overspray will cling to this background; when it is dry it is very easily brushed down, picked up, remixed with water and reused.

—Peg Townsend  
Tucson, Ariz.

### THIMBLE TEXTURES

A thimble, gently pressed into small pieces such as



jewelry, will give interesting textures.

—Peg Townsend  
Tucson, Ariz.

### KITCHEN TOOLS

A grapefruit knife is ideal for texturing leather-hard or dry clay. I find that the best tool for trimming clay is the swivel-type potato peeler. It can't cut too deep and it allows you to get into small places.

—Mrs. Lou Houle  
St. Louis, Mo.

### WHERE'S YOURS???

—Suggestions, that is. CM pays from \$1 to \$5 for each item accepted; so mail yours today! Send them to Ceramics Monthly, 4175 N. High St., Columbus 14, Ohio.

## Poco Says:

"Cold Weather Ahead . . .  
Stock up with  
Re-Ward Now!"

As one of Michigan's oldest and largest ceramic supply houses, we realize "quality" products create repeat business. For over 8 years we have seen how Re-Ward products have satisfied thousands of our customers and they keep coming back for more. We recommend Re-Ward products as the finest underglazes and glazes available anywhere in the world and we carry Michigan's largest stock.

- velvet • tru-tone
- magic mender • dul-mat
- decor • super-1-stroke

Located a few minutes from Detroit and we ship everywhere. Complete line of ceramic supplies.

## NORWEST NOVELTY CO.

32480 Northwestern Hwy. tel: MAYfair 6-6003  
FARMINGTON, MICHIGAN



## Look! 8x9x4½ FIRING CHAMBER

CONTROLLED HEAT  
ENAMELING AND  
CERAMIC KILN

only \$24<sup>95</sup>  
Plus \$1.50  
Packing Charge

ACCESSORY  
PYROMETER \$17<sup>95</sup>

Due-Kiln Amazing kiln value . . . ideal  
MODEL KN 112 for home, school and studio!

Perfect for controlled test firing where larger equipment is in use.

### Check THESE TERRIFIC FEATURES:

- U.L. approved cord and 3 heat switch
- 110 volt AC, 10 amp. operation
- Plug type self-sealing door
- 2 elements recessed 3 sides
- Firing time to 1500°; 55 min.
- Temp. range to 1950° max.
- Outside dims. 13 x 11½ x 14½
- Wt. 35 lbs.; Shipping Wt. 40 lbs.

**ORDER TODAY! SATISFACTION GUARANTEED!**  
DEALERS INQUIRIES INVITED

### 64 pages ENAMEL-ON-COPPER IDEA-BOOK

Learn jewelry making and latest enameling processes and techniques from step by step instructions. Book lists many brand new copper items never before available, complete supplies, new tools & equipment. Send for your copy of this valuable instruction book today! Rush 25c for:

**THE COPPER SHOP** A Div. of  
Immerman & Sons  
Dept. 115 • 1812 East 13th St. • Cleveland 14, Ohio



A Wedding  
Gift that  
Will Long  
Be  
Remembered

- Mold # H 691 Church Window  
H 692 Candlelabre  
H 693 Bride & Groom



Every bride and groom will be very pleased to have this lasting memento of their wedding day. It is especially ideal as a gift.



**Holland  
Mold Shop**

1040 PENNSYLVANIA AV. TRENTON N. J. EX 2-7032



# DESIGNS <sup>for</sup> CERAMISTS and HOBBYISTS



SAMPLE DESIGNS

*Write Today!*



**5**

**new design books**



**UNIVERSAL BUILDING FARGO, NO. DAK.**

# A THREE-STEM CANDELABRA

by DON WOOD

Observing beginning students and hobbyists at work, Don Wood has come up with an interesting conclusion: most people inherently have a fairly good sense of design. The reason so many end results (whether the work is in clay, metal, wood, or other mediums) look crude, tortured, ill-proportioned, etc., is because the individuals can't convert their mental images into realities. They know what they want to make—they simply can't make things come out right!

This is usually due to poor forming techniques, lack of inventive ingenuity, bad craftsmanship or to combinations of these difficulties. With these facts in mind, Mr. Wood has prepared a series of articles devised to help alleviate most of the problems.

He handbuilds a variety of items, using tried-and-true methods or inventing new ones if needed, and he documents each step along the way with close-up photos. In some instances, when he wanders up blind alleys, he takes the reader with him, to show how these experiences help in the ultimate development of a working procedure that really works. And, each time, he designs and builds an interesting, useful and functional object.—Ed.

**A** craftsman—hobbyist or professional—is an inventor whose original idea is no more important than the methods he invents for giving it form. To conceive a design in the mind is of little value without a comprehension of how it can be constructed.

As his experience accumulates, a craftsman will find that inspiration for a design will often suggest its own method of construction. Conversely, a method of construction will often suggest a design to the craftsman.

In any case, the two—design and construction—are inseparable. Awareness of this fact is an important step toward realization of a successful design. The experience of designing and

constructing the three-stem candelabra described below shows the importance of thinking of forms in relation to methods of construction.

The idea for this ornamental candleholder was suggested by some interesting thin-stemmed weeds which I saw in a field. They grew in rolling sod, amid round stones. How to construct the piece in clay was not immediately apparent; some trial and error was necessary before I found a workable procedure.

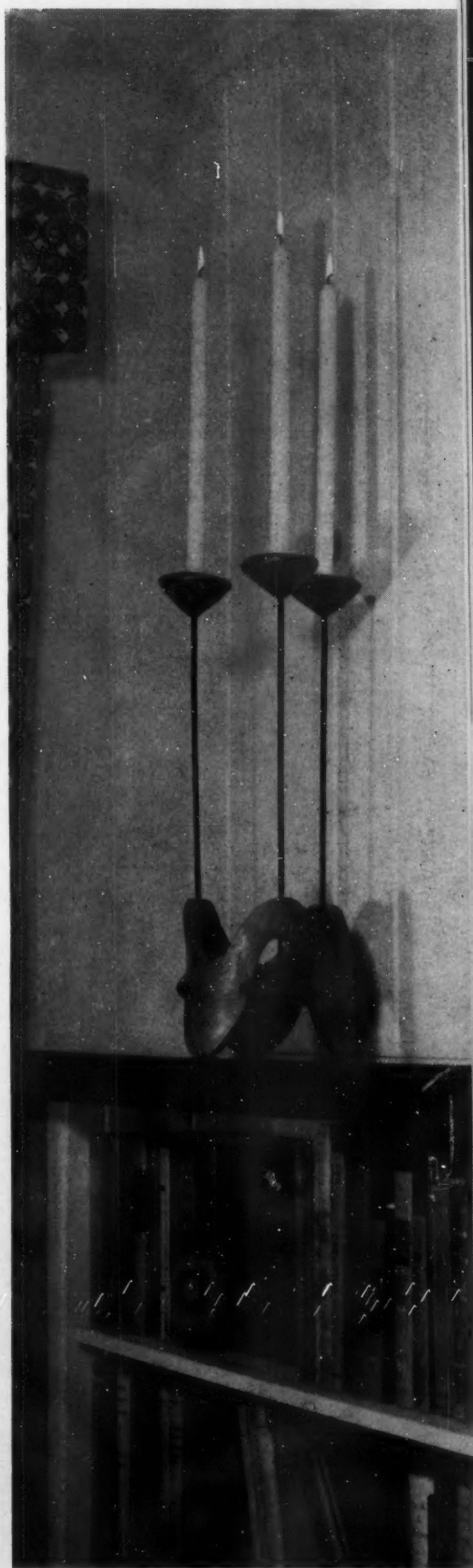
When the idea for the form of the finished piece first came to mind it seemed to call for three up-side-down "V" shapes welded together at the bottom. The finished form would consist of three peaks each holding a stem and resting on three "feet."

I experimented with this procedure and learned that the soft clay could not stand up. It was obvious, therefore, that another method of construction was necessary since I did not want to use stiffer clay. (Soft clay is easier to manipulate without the danger of introducing cracks; moreover, welds and added pieces of clay will hold better without cracking apart during the drying period.)

I finally decided to try a cylinder as the beginning shape and proceed from there by cutting away here, adding there. (A cylinder is a shape that will hold its form quite well even though the clay is soft, making it easy to develop the design without the problems of distortion and collapse entering in.) The step-by-step procedure (shown in the accompanying photographs) was carefully planned in advance so that the maximum support offered by the cylinder shape could be maintained until the clay had stiffened enough to hold its own weight after the side areas had been cut out.

1. Strips of clay about seven inches wide were rolled out with a rolling pin (see inset photo, next page). Two pieces of wood three quarters of an

(Please turn the Page)





## Designs For Hand Building

inch thick were used as thickness guides. Flats of clay were rolled out and fastened end to end until a strip twenty-four inches long (and seven inches wide) was made.

The long rectangle of clay was set on edge and shaped into a cylinder. The

ends were overlapped and securely welded.

The clay was somewhat deformed by this handling so a vertical-sided tumbler was called into service. The tumbler was rolled around the cylinder inside and outside, and top and bottom (accomplished by turning the cylinder upside down) until the cylinder once again had smooth walls of even thickness.

2. The cylinder, symmetrically formed, was next divided with notches into three equal parts along the top rim (sticks were placed in these notches so that they would show up more clearly in the photograph). A paper pattern was then made. The pattern was in the shape of a semi-circle whose diameter measured one-sixth the circumference of the cylinder rim. The center line was marked on the pattern so that it could be aligned directly with the notches on the top of the cylinder. A semi-circle pattern was traced on three sides.

3. The three semi-circles were cut out as whole pieces, turned upside-down and placed on the three uncut sections of the rim. They fit exactly since each equals one-sixth the circumference of the rim. The clay was carefully welded together and the seams completely obliterated.

(I chose this method of forming the peaks and troughs because it enabled me to work with a shorter, and therefore easier-to-handle, cylinder. An alternative method would have been to start with a cylinder of full height and merely cut in the design.)

Clay was added to thicken the tops of the peaks where holes were to be drilled for the stems. In addition to giving added strength, this thickening afforded good contrast to the rest of the cylinder, enhancing the design.

4. A bell-shaped pattern was cut out and the center fold aligned with the axis of the peak. The pattern, which further carries out the thick-and-thin contrast, was traced on all three sides.

5. An egg-shaped pattern was traced

horizontally across the center of each peak. This was built up into rounded thickness by pressing in pieces of soft clay until the full egg-shaped form was achieved. (The egg shapes and the wavy band, which constitutes the main body of the candelabra, are both reminiscent of the rolling ground and round stones which characterized the natural setting for the weed which originally inspired this design.)

The egg shapes, which will hold the bottom ends of the stems, were developed in the three positions from the outside as well as the inside. Then the portion directly above was cut out and the top of the egg shapes completed.

6. The main cylinder of clay had, by now, dried to a near leather-hard stage and the bottom section of clay was cut away without danger of the piece collapsing. The finished egg shapes, acting as additional supports for the three legs of the candelabra, provided an extra margin of safety.

7. The basic form is completed, except for drilling holes to hold the stems. This is done easily with an auger bit of the type commonly used for wood. The holes should be slightly larger than the steel rods which will serve as stems, so that the rods will fit in, even after the clay shrinks in drying and firing. Holes should be drilled when the piece is leather-hard, but not too dry, because dry clay will be cracked by the drill bit.

8. Now we turn our attention to the candleholders. Three balls of clay exactly the same size were rolled in the hands. It is easier to make pieces of uniform size if the clay balls are carefully sized at the beginning. The candleholders were made by first pinching out three equally-sized, cone-shaped pinch pots. The centers were then filled in and the pieces set aside to become leather hard.

When leather hardness was reached the shapes were trued up, sponged and smoothed.

9. Holes to take the stems were drilled in the pointed end of each cone. Then the inside was drilled to take the candle using a larger drill bit. Again, the holes were made large enough to allow for shrinkage.

For the drilling, the pieces were held in one hand as shown in the photograph while the auger bit was turned with the other hand. The clay piece itself was turned a third of a turn or so from time to time to check the alignment of the auger bit so that it would go in straight.

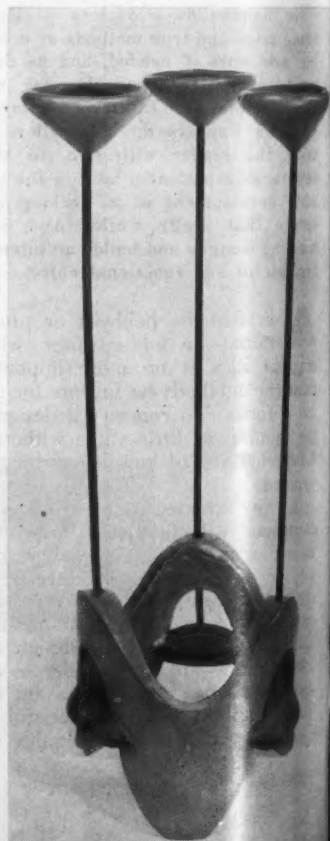
It may be found when the stems are inserted that the holes have not been drilled perfectly vertical. This may be due to an error in the drilling

or to warpage of the clay form during drying and firing. It is not, however, a major problem. The stems, which are of one-quarter-inch round, mild steel are easy to bend by striking with a hammer. Take them out of the piece and bend them slightly at the point where they come out of the peaks in the base piece. (Rods to make the stems may be purchased from any welder where wrought iron products are made.)

The completed candelabra (bisque fired, then glazed and fired again) is shown in a close-up view below, and in use in an interesting setting on the preceding page.

Reviewing the construction procedure which was followed, I feel it was a successful project. Good control of the form was maintained at all times, and the procedure made it possible to see the form at all times during its growth and development. The inseparable companions — design and construction — complemented each other quite nicely.

With respect to the form, the candelabra has been fun to use. The heavy, stable base nullifies any feeling of top heaviness that might arise, even when extra-long candles are used. The open form offers various possibilities for decorating with seasonal greenery, yet the design is interesting and complete as a form by itself. ●







1

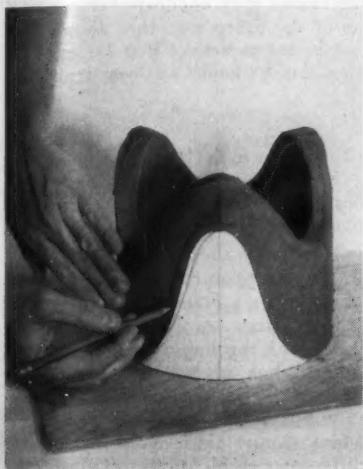


2



3

*"Here's how", says designer Wood as he shows how, in*



4



5



6

*this case, design suggests construction.*



7



8



9



# Leaves Through the Seasons

by BEE BASCH

The ceramic decorator has a world of materials within his reach—commercially-prepared glazes, underglazes, slips, etc.,—from which he can derive much enjoyment and satisfaction. To be sure that he does, CM is starting a new series of articles.

"Most hobbyists hesitate to experiment, they are afraid to mix different materials together in an attempt to get unusual (planned or unplanned) results," says Bee Basch. "Experimenting with new glazes and underglazes, or using old materials in new ways is to me the most fun. I know that many decorators would find it absolutely fascinating, too; but they are either afraid or shy when it comes to trying something on their own. I hope these articles help them lose their inhibitions!"

Mrs. Basch will give full details on the procedures she follows and trade names of the materials she uses, so that the reader may duplicate her results if he wishes. Moreover, she will describe some of the procedures that do not work out as anticipated so that the reader will not be led to believe that the expert is always successful. We feel quite sure that Mrs. Basch's hopes will bear fruit.—Ed.

For the  
HOBBY DECORATOR THERE ARE so many ways to derive inspiration from nature. *Shape, line texture and color* are only a few, but they are the qualities I like most. Recently, I worked out a project that embodied each of these—and I would like to tell you about it.

I love the Chinese Witchhazel bush, with its interesting habit of growth and its flowers that bloom in February while there is still snow on the ground. What I particularly like about it is the shape, line, texture and *changing color* of its beautiful foliage. My aim was to show each of these qualities in a series of cast pieces.

Shape and line were comparatively easy. The leaf has an interesting shape. At first glance it appears bisymmetric—but it isn't: one half of the leaf is larger than the other. On line—the pattern of the veins is fascinating: vein lines achieve rhythm through repetition, but they are not static because their direction, length and spacing vary. It was a simple matter to make a clay model of a typical leaf and to make a one-piece,

plaster slip mold from the model.

For texture—the matt glazes seemed best since the leaves look and feel like velvet.

Now came the most difficult task. I wanted to capture the subtle changes of color that I found so interesting; tell the story of the Chinese Witchhazel leaf through the changing seasons. What glazes or glaze combinations should I use to depict the texture and changing colors of the leaves? Many, many tests evolved in which different combinations of glazes and casting slips were tried (glazes will react differently on different bodies!).

Finally, I had six leaves. These, I felt, brought my project to a successful end. Here is how each seasonal leaf was achieved.

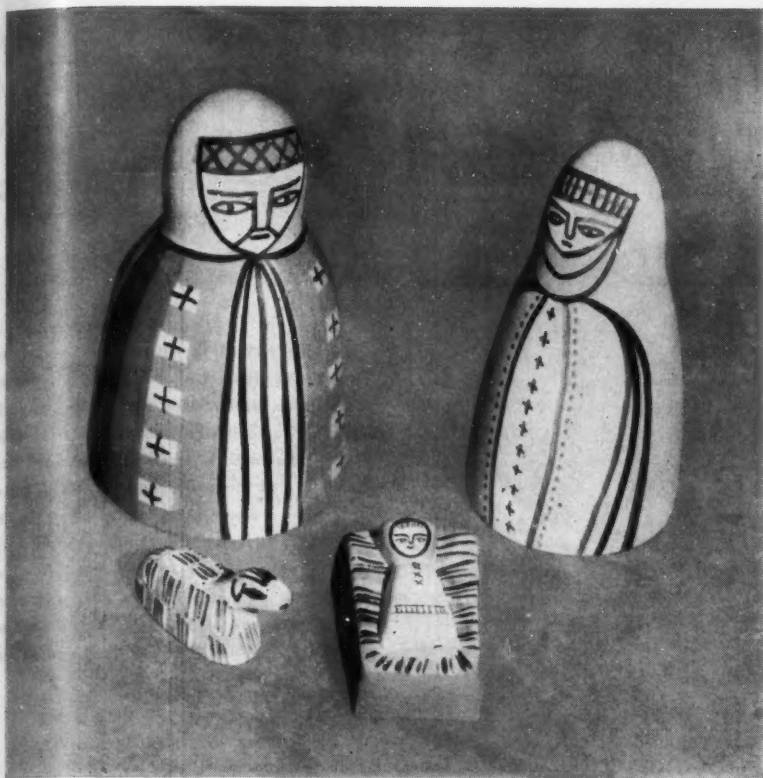
## Spring.

To represent the soft, young foliage of Spring, I started by pouring the mold in Lehrhaupts' white slip. After bisque firing, I glazed with *Pemco's Bronze Green* (PA-4345) and fired to cone 06. This is a dry glaze which I mix with water using a mortar and pestle. I find it easier to spray on than to brush on. The result is a soft, rather deep chartreuse, with a faint tan line along the veins.

Since it is an *art glaze*, it has a tendency to "break up" at the veins, and there is a slightly darker tone of green in the crevices. It was a gloss glaze in my kiln but the color seems so right for Spring, and the gloss sug-

(Please turn to page 37)

Bee Basch captures the exact color of the Witchhazel leaf as it progresses through the seasons. Beginning with the soft young green of Spring, she takes us through the rich golds and browns of Early Autumn—to the last frost-blackened leaf of Late Autumn. In the accompanying article, Bee tells in detail the materials and procedures she used.



# MAKE YOUR OWN NATIVITY SET

by MURIEL ANDERSON

If you have ever hurried from one store to another during the holiday season, trying to find a Nativity Set for your own home or for a gift, you can understand why Irene Kilmurry decided to make her own. It is easy to find "pink and blue" plastic sets, but hard indeed to locate one with individuality and artistic expression.

Irene, who for nine years has taught in the Art Department at Cardinal Stritch College, Milwaukee, decided that July was not too early to start thinking December thoughts. She began to look through art reference

books, and talked to friends about the type of Nativity Set they'd like. She decided that it should have simplicity of form and that it should retain the dignity of the occasion, Christmas.

"There are so many techniques one could use," she told us, "but I decided upon a cast technique and used Peruvian forms as my inspiration."

The original forms were cut out of plaster (they could have been modeled in clay); from these, simple molds were made. Note the complete lack of detail on the figures; this allows full freedom for the decorating (see photo, below center).

Since it was the artists' goal from the beginning to keep each set individual, she has carefully chosen a different decorative technique for each set she has made. Some have been decorated with colored slip, others with underglaze painting or sgraffito and glaze. Still others are decorated with modeling.

"The procedure is simple and the results so satisfying that any ceramist would do well to explore the possibilities of making his own Nativity Set," says the artist. "An original set is a gift which friends will treasure and enjoy for years." ●



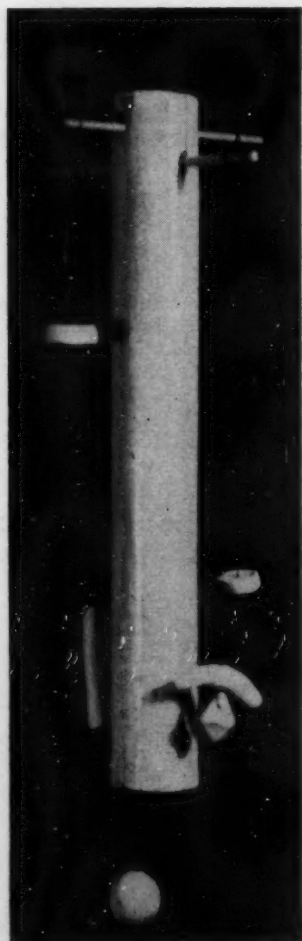
Irene Kilmurry poured red slip into molds for the figures of her Nativity Set. Basic shapes, being blank, offer unlimited decorating

possibilities: carving sgraffito, and underglaze painting with black outlining are just a few of the many well-suited techniques.



# BEL

Experimenting with various shapes and sizes, one clapper or many clappers—inside or outside, author Marxhausen came up with some interesting results: a sampling is shown here. Each bell was cast, many of them altered afterward, and all were hard fired. One of the first attempts, a rather standard type of bell, is shown at left, above. Later results, not so standard, are also shown. But Marxhausen says, "they are all fun"



A cylinder of clay (left), cast in a mold made from a mailing tube, becomes a multi-clapper bell. The pendulum is used to pull the bell against the decorative clappers. The three-unit bell (above) comes from a bud-vase mold. It produces only one note, but each has its own distinct quality.

# BELLS are what you make them

by REINHOLD P. MARXHAUSEN

A bell is a wonderful instrument for perpetuating joy at Christmas time—and throughout the entire year. Most bells are made of metal, but since hard-fired clays can be made to produce beautiful tones they too are excellent materials to use.

What shape should a bell have? Do bells have to be in one piece? Can they have more than one clapper? Do clappers have to be on the inside? These are some of the questions I asked myself as I began experimenting with bell-making. One thing I was already sure of: the very look of a bell should suggest sound or "ringability." With this in mind I worked with basic shapes such as spheres, cones and cylinders—and then, variations of them. These are some of the things I discovered.

If you are casting your bells, you can produce a variety of tones from the same mold by altering the thickness of the casting. A thin wall will produce a low note; a thick wall a high tone. If you use more than one clapper in a bell, you will obtain a rapid continuous tone.

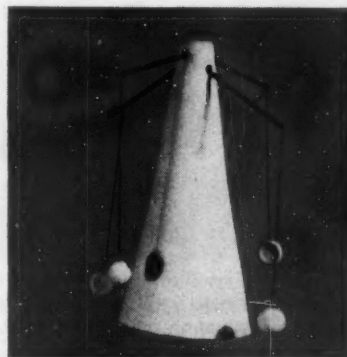
Exposed clappers lend themselves to the overall design; so why hide the sound producer? Besides, the exposed clappers suggest beautiful tones even before the bell begins to ring!

A pendulum idea is a great deal of fun. The pendulum (a clay weight at the end of a string hanging down from the bell) can be used to shake the bell against the clapper (or clappers) and vice versa. If the clay weight is quite heavy and you start

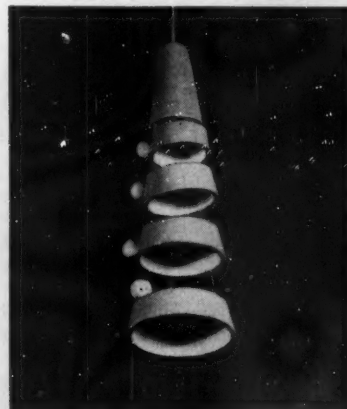
(Please turn to Page 30)



Altered vase form. Before closing the neck, rolling clappers were dropped inside.



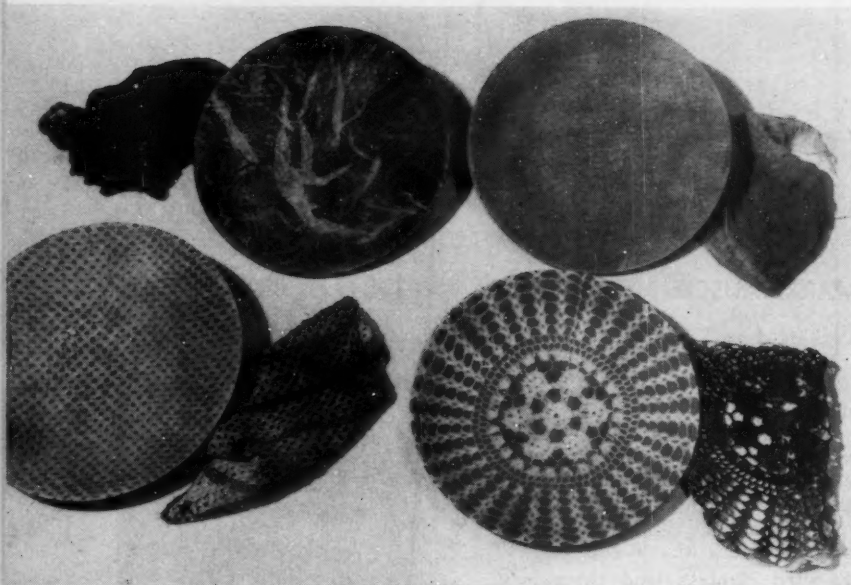
Cone shape gets its decoration and voice from four clappers hanging outside.



Rings cut from cone (above) made this charmer, each ring having its own clapper.



A bell mobile sings its song when the handle is pulled down making the shallow cups strike each other. Cast different thicknesses for different tones.



Spray underglaze through fabrics of different weaves for a variety of interesting backgrounds. Starting at top left: cheese cloth (wrinkled), cotton tulle, dishcloth, cotton doily.



# DECORATE with UNDERGLAZES

## 6. BACKGROUNDS

demonstrated by MARC BELLAIRE

**For the HOBBY DECORATOR** ONE OF THE easiest ways to obtain interesting backgrounds is to spray color through different fabrics. This can give you a wide variety of patterns with practically no effort on your part, an important factor with the holiday season approaching and many rush-gifts to be made.

Any fabric with a wide enough weave to allow color to get through will work. For this demonstration on plates, Marc Bellaire used a cotton doily, a dishcloth, cheesecloth and cotton tulle.

The procedure is quite simple. The fabric should be thoroughly dampened so that it will stick to the surface without fluttering under the pressure of the air brush (fluttering will distort the pattern). Damp fabric will stick to bisque ware, too, providing the bisque is dry.

Next, set the plate on a banding wheel so that it can be turned, enabling all sides to receive an even application of spray. You can spray

on a heavy or light application, depending on the needs of the decoration.

Variations are limitless. All kinds of textured cloths, such as onion sacking, burlap, crocheting and so forth, can be tried. Moreover, a variety of effects are possible from each cloth, if you alter the way the cloth is laid on the surface to be decorated.

For example, different results can be had with cheesecloth if it is roughly folded and pleated; new cheesecloth can be distorted by pulling it between the fingers so that all of the openings will not be identical in size and shape; and so on.

You needn't rely entirely on the air brush, either. For more varied effects, try other methods of spraying or spattering underglaze through the fabrics. A hand-operated *Flit* gun, for example, will give a rougher and more varied texture. Spattering from a toothbrush will give still another result. Once you start, you will find that each idea leads to another.

"When backgrounds are completed, let them suggest motifs to you," is Marc Bellaire's advice. The wide-mesh background obtained from the dishcloth suggested *fish* to him. He followed through on this thought, as you can see from the step-by-step demonstration on the facing page.

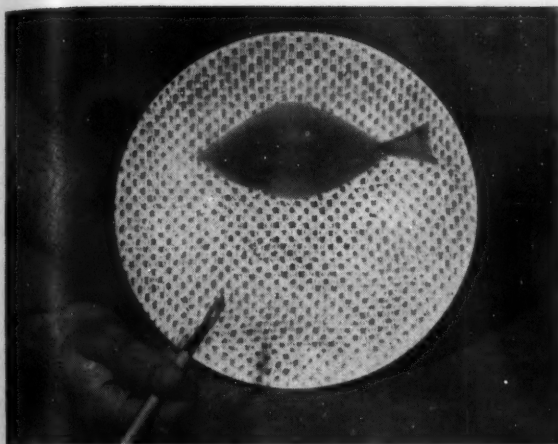
### Follow These Rules for Best Results

1. *Work on green ware or bisque that is clean and slightly damp.* Dust, fingerprints, and other forms of surface dirt should be removed by wiping the piece several times with a quite-damp sponge immediately before decorating. Don't be timid! A slightly roughened, damp surface is ideal for brush decorating.

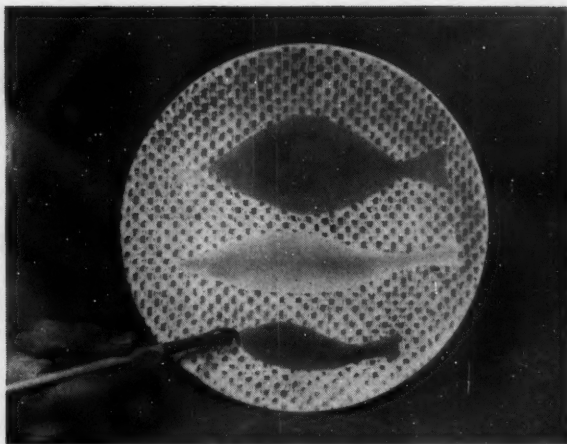
2. *Use a large, fully-loaded brush.* Work with as large a brush as the design permits, saturated to the hilt, so the color flows generously when touched to the piece.

3. *Keep underglaze sufficiently fluid.* Add water as the colors dry out to keep good brushing consistency.

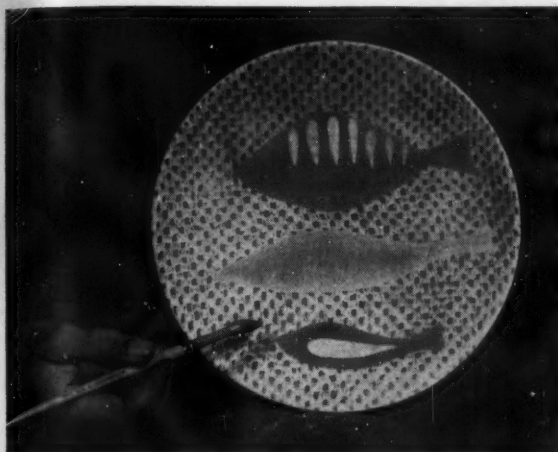




1. "Let the background suggest the motif," advises Marc Bellaire. The wide-mesh-net background on this plate meant fish to him; he chooses a stylized fish shape.



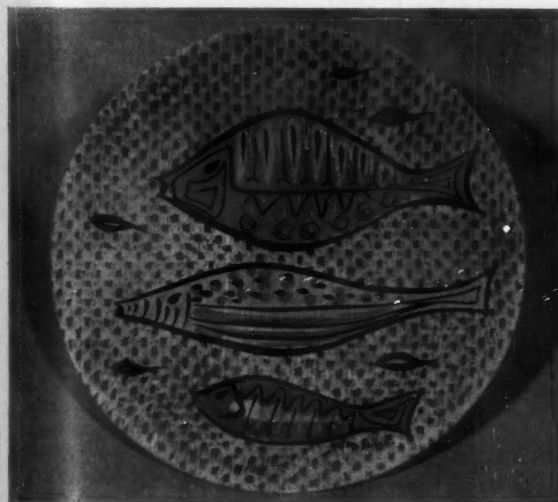
2. Two more fish complete the basic design. Note how they complement each other; yet, since they vary in shape and size, monotony is avoided.



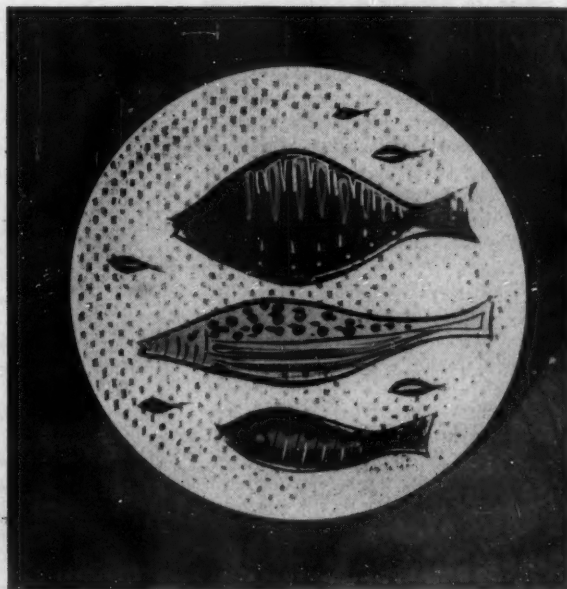
3. These are to be fanciful fish—there are no limits on the colors selected. Here, accent colors are going in, with single strokes of a well-saturated brush.



4. More color accents—this time in the form of dots. These are "dropped" in place by touching down the tip of a large brush, loaded to near-dripping capacity.



5. Outlining and final accents in black snap up the motif and hold the gaily colored fish intact. The finished green ware is above; at right, the fired piece.



# Strictly Stoneware

## ... kiln-wash scrapings make grog

by F. CARLTON BALL



THERE IS A waste material from your kiln that can be used as grog. This is the regular standard kiln wash composed of china clay and flint in equal proportions. I save old kiln-wash scrapings and use them to get contrasting-colored texture in a dark clay (and if you consider this a trick, let me say it is one of my favorite tricks—I like the idea of putting waste material to good use).

After every second or third firing, I scrape the old kiln wash off the shelves. Usually it can be pushed off easily with the claws of a claw hammer although sometimes a sharp, cold chisel is needed. These scrapings make quite a pile of flakes which ordinarily would be thrown away.

If the kiln wash is gathered together and kept clean, it can be used at any time for grog. This material can easily be crushed in a mortar with a pestle. It should then be screened and graded so that you have at least three different sizes ready for use. The crushed and screened kiln wash is white, so when it is added as grog to a chocolate-brown clay, a red clay or dark-buff clay, the resulting contrast is excellent. This kiln-wash grog is soft and for that reason it doesn't hurt your fingers during throwing as much as hard-fired grog does.

The idea of using a white grog in a dark clay worked so well for me that I thought the reverse, a dark grog in a white clay, would be a good thing to try.

For the dark grog, Albany slip clay (Sadler clay would also be satisfactory) was used. Water was mixed with it to make a plastic clay. This clay was spread out thinly on a sheet of cloth and allowed to dry. The dry clay was gently crushed with a rolling pin. The crushed clay was screened through a kitchen screen and the large lumps returned to the cloth to be crushed gently again, and again screened. The screened particles were then screened through a 40-mesh

screen to eliminate the dust; and finally a 10-mesh screen was used to divide the coarse particles from the fine.

To be satisfactory as grog, dry Albany-slip clay must first be fired. The coarse lumps were therefore put into one old bisque pot and the fine lumps in another, and fired at around 08-07. This turned the Albany-slip clay into a grog (which I shall call Albany grog).

I tried wedging dry, unfired lumpy Albany-slip clay into white clay for throwing. The results were rather interesting but Albany-slip-clay lumps get soft and about all that is achieved in the way of a thrown pot is an unsatisfactory marbled effect. The bisque-fired Albany grog was soft but it did not dissolve in water.

Now that the dark grog has been prepared, the white clay to be used must be decided upon. Albany slip clay becomes a brown glaze at cone 5. If a porcelain-clay body is used, it can be fired to cone 10 and will be white in color and contrast nicely with the Albany grog.

Quite a lot of this grog must be wedged into porcelain clay in order to get an all-over texture (you can check while wedging each time the clay is cut with the wire). If the grog is used too sparingly, the all-over effect is spotty and appears to be unintentional and poor.

Now this clay can be used for throwing on the wheel. In throwing, it is best to use only the fingers to shape the pot—wooden or metal ribs do not work well with this grogged material. The pot should be thrown to the finished shape as nearly as possible because when leather-hard the pot is difficult to trim because of the grog in it. Trimming must be done carefully and very little of it should be done. After trimming, the pot should be allowed to dry. The next

step is to sponge the surface with a fine, wet sponge. This washes the fine clay off and away from the grog, leaving the grog dominant and clean. After drying the pot a second time, it can be fired.

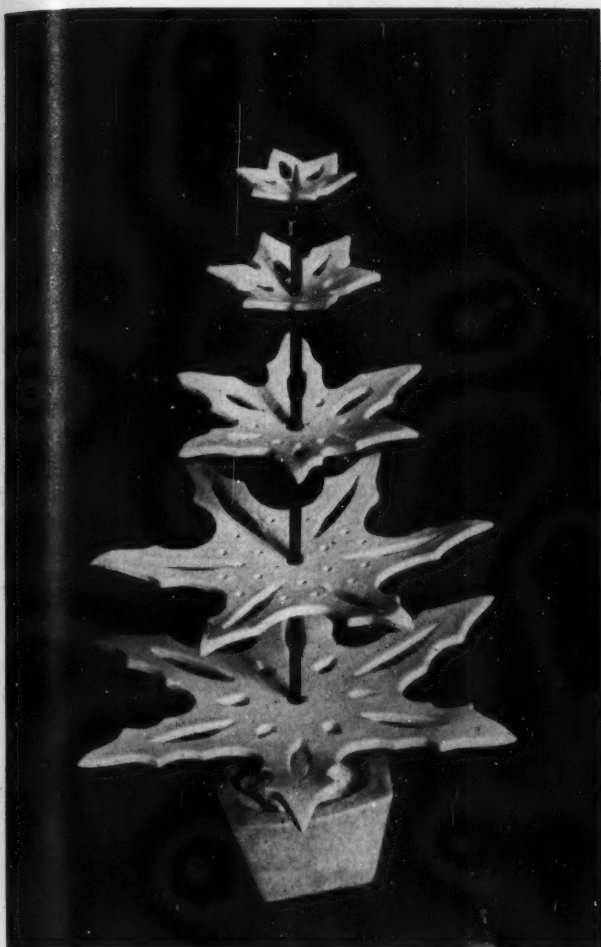
The pot can be bisque fired at a low temperature and then glazed inside with a feldspathic glaze and fired in a glost kiln to cone 8 or 10. The green pot, without a glaze inside it, can be fired in a glost kiln to cone 8 or 10. The white porcelain clay should become mature and vitreous. The Albany grog will melt into a glass—a nice, shiny black glass. As a result the finished piece will have a white matt surface covered with shiny black “beads”—quite different, unique and beautiful. If the sizes of the black beads are right for the size of the pot, if there are enough but not too many, if the shape is adjusted to this surface treatment, then you will have a very fine pot.

A variation of this effect can be gotten by using a buff clay in place of a porcelain. Jordan clay and Monmouth clay turn a gray color in a cone 10 oxidation firing: this gray clay with black beads should be subtle and pleasing.

If a glaze were to be used over the pot with Albany grog in it, the glaze would probably flux the grog. If the glaze was the least bit soft, the grog would give dark streaks that *might* be good. If the grog melted and ran too much, then the holes the grog ran out of would be unpleasant. If a stiff white matt glaze was used over the pot, the final effect could be beautiful. The type of glaze and the firing are the factors controlling the final effect.

This Albany grog can be used in a cone 6 or 7 white or buff body. The grog will not become as smooth and shiny or as black as in a higher fire but it will be effective nevertheless. The variations can go on and on for that's the fascinating thing about pottery. The bodies can be tinted, the grog can be fluxed for a lower temperature—just to mention two directions for those interested in carrying this idea further. ●

*This is the third in a series of monthly articles on stoneware. If you would like Mr. Ball to discuss a particular subject, write him, c/o C.M.*



# thin slabs of clay make YULETIDE DECORATIONS

by JOHN IMHOFF

**I**t has long been my contention that ordinary materials and simple methods can give unusual results. Too often the amateur allows himself to be brow-beaten by his own thoughts: *if only I had more equipment or if only I knew more about glazes, etc.* Good equipment and technical knowledge are helpful, but imagination and sensitive execution are *indispensable*.

With this bit of philosophy, let us go on to the fascinating challenge of developing unusual ceramic Christmas accessories. We realize at once that trying to duplicate in clay the flashy quality of glass and synthetic materials is probably a false approach.

Consider the possibilities of ordinary white clay—its structural properties as well as the crisp, clean decorative effect of the gleaming white, glazed clay against the dark Christmas greens. We have at our fingertips a vital material, valid in its own right! So let's use it: white clay with glaze.

As to method, one that anyone can

manage: the familiar "clay pancake" rolled between cloths, cut to shape, perforated, then draped or bent to take it out of the ordinary flat, cut-out category.

## The Snowflake Tree

To make the "Snowflake Tree," cut several snowflakes of graduated sizes from folded paper. Those in the tree shown here are hexagonal like natural snowflakes. If you would like to make a five-pointed-star snowflake, don't let convention deter you. The diameters of these may vary, as may their number. The pieces in the tree shown graduate from two to eight inches in diameter and are arranged to form a tree 10 inches high, exclusive of the container.

More than five pieces may be used, but too many that are too closely spaced tend to give a cluttered, heavy appearance. Design the perforations in a variety of ways—no two real snowflakes are alike.

When the paper patterns are cut,

roll out the clay between cloths in the usual way. Facilitate your work by rolling each piece separately; in this way the thickness of the pancake may be varied with the diameter—the larger pieces need to be slightly heavier for strength. The thickness of an ordinary yardstick is a good starting point, thinning down for the smaller pieces.

The trick of beveling the edges with a knife or abrasive paper when the piece is leather-hard or dry helps to enhance the illusion of thinness.

Lay the pattern lightly on the clay and cut the outline with a sharp, pointed knife held vertically to obtain clean edges. The larger perforations may also be cut at this time, but the smaller perforations can be done more easily and accurately if you wait until the clay is at least leather-hard. Use a wood drill bit or the tip of a pointed knife to drill round holes, then carve these into a variety of other shapes or combinations of

(Please turn the page)



## YULETIDE DECORATIONS

shapes. How fancy can you get? That depends on your own imagination and skill.

After the initial cutting is completed, transfer the piece (still on the bottom cloth) to a plate, saucer or lid of suitable size. Gently persuade the piece to take the graceful curve of the support, with the points dropping gently beyond the rim of the support.

Allow it to dry, either leather hard or completely, then finish the perforations as suggested above. Now you are ready to fire and glaze the pieces.

What about the tree trunk? Fortunately we had at hand a florist's stick already pointed and stained green. If such an item is not available to you, a dowel stick of suitable diameter can be obtained at most hardware stores; it can be sanded to taper if desired and painted or stained.

Rubber washers, placed underneath the ceramic sections, were found to be an inconspicuous and workable means of stabilizing pieces

at suitable intervals on the stick. A little jar or pot filled with sand completes the set-up for your individual and decorative tree.

### Hanging Ornaments

Using the same materials and methods, we now turn to hanging ornaments. For these, motifs of fruit, stars, leaves and butterflies were chosen. Being derived from traditional forms, these ornaments may be used with most conventional surroundings. I have tried the extremes of making ornaments as nearly realistic as possible and also completely abstract. Neither extreme, however, has had the all-around appeal of the ornaments shown here.

You will note also that symmetrical designs were used. The purpose of this is two-fold: it is simpler to arrive at a satisfying, clean-cut design that is suitable for the purpose and method and from which a pattern may be easily cut by using the folded-paper technique; second—but by no means a trivial consideration

—asymmetric designs pose the problem of weight distribution and can be very difficult to hang successfully. These restrictions should not prohibit you from trying unusual shapes, but they will probably take more time to work out.

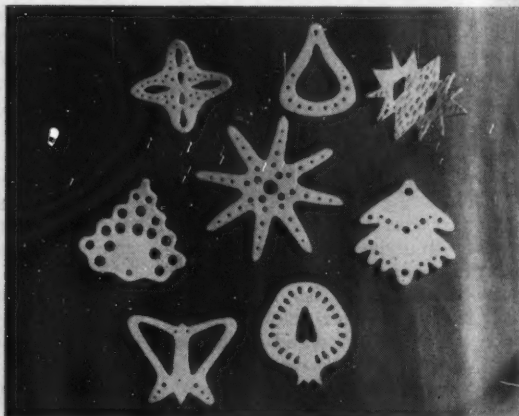
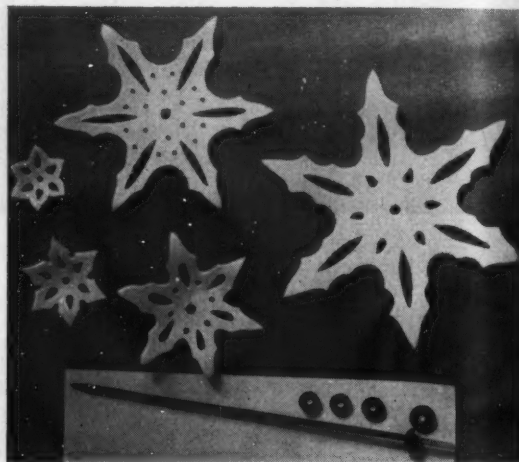
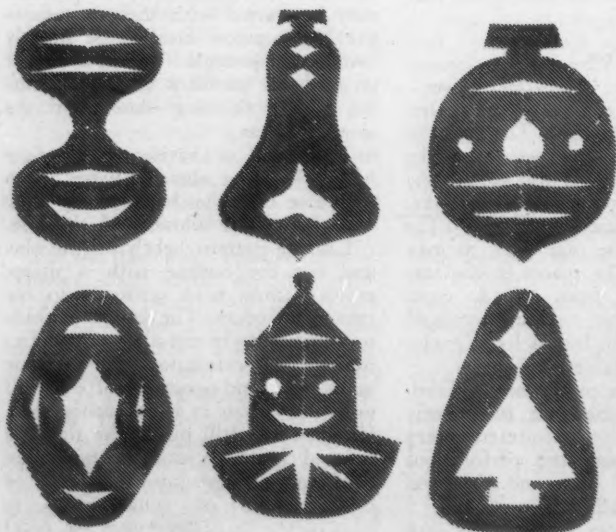
Various types of commercial ornament hangers may be used to suspend these ornaments. The type you use depends on the location of the holes in the ornaments and where the pieces are to be hung. With informal arrangements I like to use nearly-invisible loops of dark thread. In some instances the use of colored narrow ribbons adds a welcome touch of color.

If you brush decorate with overglaze gold or platinum, hang ornaments from metallic thread or ribbon of the same shade. Similarly, if you add gold brush decoration to your ceramic Christmas tree, gild the trunk for a bit of harmonious glamour.

Again let me say, use your imagination; don't be afraid to improvise. You will be able to make decorations both beautiful and unique. ●

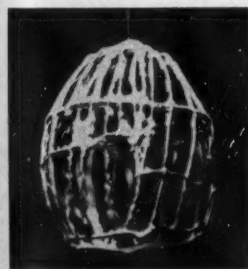
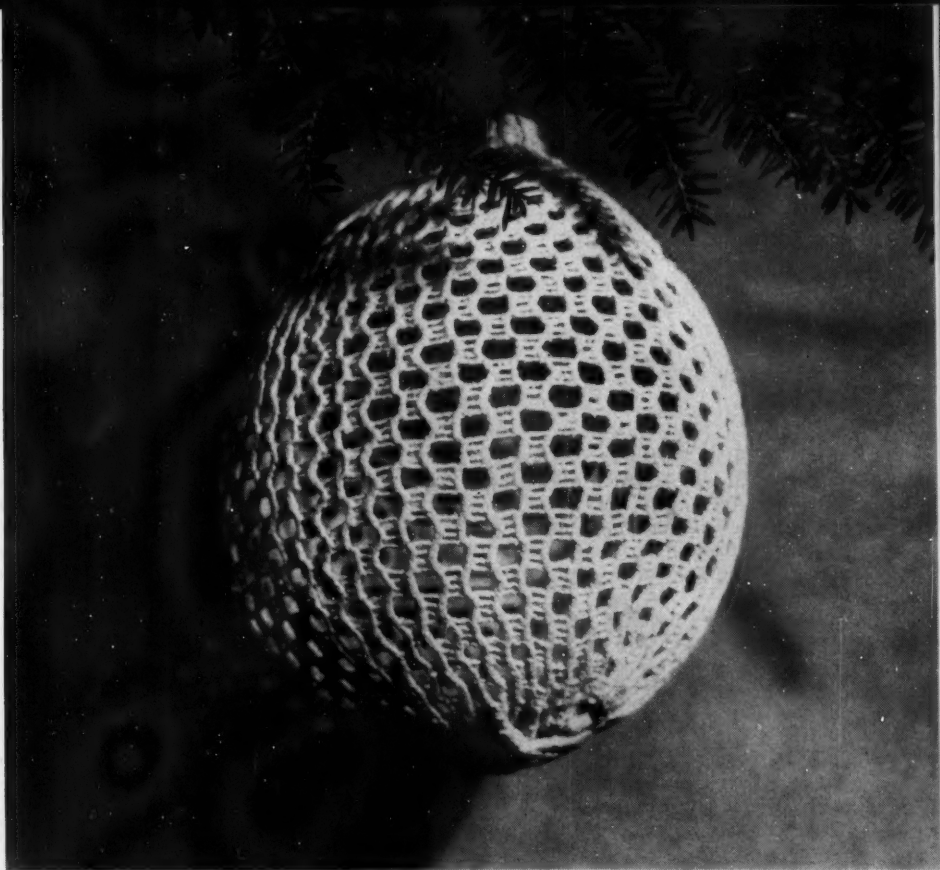
SNOWFLAKE TREE, shown on the preceding page, is made of ceramic "snowflakes" arranged in graduated sizes. The "snowflakes" were held in place by rubber washers on a pointed wooden stick (parts shown at right).

HANGING ORNAMENTS may be created from patterns cut from folded paper. Patterns below are merely suggestions. The end result (right below)—gleaming white ornaments—may be used very effectively against Christmas greens.



**FRAGILE BUT  
FUN . . .**

**Wrap Slip-dipped  
Yarn or Fabric  
around a Balloon  
to Make . . .**



HERE ARE examples of what you can do. Slip-dipped fabrics—(1) dish cloth, (2) net, (3) lace, by Du McKinley. Slip-dipped yarn (4) by Marxhausen.

## Ornaments With a Delicate Air

**T**he idea of making Christmas decorations from yarn, string or fabrics dipped in slip and later fired came to CM from Reinhold Marxhausen (whose article on "Bells" appears in this issue).

"The slip-dipped ornaments are quite fragile and require a great deal of patience in the making," he says, "but you can come up with some very interesting results." Marxhausen, one of whose own yarn experiments is shown at lower left, this page, has forwarded helpful suggestions on "how to do it":

1. Blow up a medium-sized balloon—rather full at first; then let out some of the air to produce a little slack. Hang the balloon at a working height that is comfortable for you.

2. Dip yarn (or string, thread, etc.) in slightly-thinned slip and let it become saturated (if the material has been dampened beforehand, it will

absorb slip more readily). A thicker coating of slip can be built up, if desired by removing the yarn, allowing the slip on it to dry, and then re-dipping it. Each time this process is repeated, another thickness of slip will be added to the surface.

3. While the yarn is still wet with slip, wrap it around the balloon. The wrapping may be done in a haphazard design or in an orderly pattern. In either case, it should be done quite rapidly—before the slip has a chance to dry. If the yarn does not appear to be holding at intersections, apply drops of slip at these points after the whole design is finished.

4. Allow the ornament to dry. If it shrinks and begins to tighten on the balloon, let a small amount of air escape from the balloon as a precaution against cracking. When the piece is thoroughly dry, deflate the balloon and remove it.

(Please turn to page 34)

## Plaques To Personalize

**T**he person who "has everything" is a problem on anyone's Christmas list. But *you* can do something about it. Small enameled plaques will help you solve your problem. You'll find them adaptable as gift items, either by themselves or as decorative additions to otherwise commonplace items.

Don't be deceived by the fact that plaques are quick and easy to make. Start making them now. You'll find yourself becoming busier as the holidays approach.

It's a good idea to make several plaques, enameling them with basic coats. Then later, when you're in a hurry, each one can be quickly personalized by inscribing a name and address on the back, adding a design on top, and finished in one firing.

You may even have some small plaques already on hand. In my own work, I use them for experimenting with new ideas in color and design. If you use this same testing method, why not drill a hole in some of the copper bases, (before enameling, of course) so that if the test plaque turns out well you can use it later as a key chain tag, watch fob, or necklace ornament?

**USED BY THEMSELVES**, plaques, when inscribed, become useful for identification on key-ring chains, etc. Your own handwork with your friend's name and address inscribed on the back—could you give a more completely personal gift? The tag can be any shape, with enameling on the top side done in any technique or design you like.

From a practical point of view there are a few things to keep in mind. The hole drilled in the plaque must be large enough to accommodate the chain and, before firing, the edges of the hole should be cleaned back far enough to prevent the movement of the chain from chipping the enamel.

Counterename the back side in either a dark or a light color, not a medium value, so that the inscribed name and address will be clearly legible.

Keeping the inscription legible while also keeping it small enough to fit the limited space, may present

something of a problem. One easy way of doing it is to scratch through overglaze paint. Cover the back of the piece (which has been counterenameled and fired) with overglaze paint of a much lighter or darker color than the base coat. Allow it to dry completely. Then, with a sharp pointer, scratch in the name and address. If you write directly on the counterenameled base, use a fine lettering pen and an overglaze metal such as gold or platinum.

Signature and design firing need not be separate. Simply place the tag, name-side-down, on stilts and fire both sides in one operation.

**FASTENED ON**, plaques add a personal touch to many everyday items. Take, for example, such accessories as metal-encased folding combs, hair barrettes, buckles, or pins. All of these may be obtained from a local department store, an enameling supply house, or a mail-order novelty company.

The copper for your plaques may be shaped to fit the face of the particular item—curved, bent, or merely soldered flat to a flat surface, depending on the size and shape of the base item.

**A FOLDING COMB**, for example, is mounted in a metal case to which you can solder either one large plaque, or two or more plaques in a combination design as shown in the accompanying picture. If one piece of copper is to be used for the plaque, be sure it has been sufficiently treated (annealed and planished) to prevent warpage. In any event, the back should be counterenameled and bare spots left for soldering.

If the comb case has a protruding button or hinge, the copper shape must be cut to fit so that it will lie flat. If the enameled section is to be soldered to the case, the shape should be so designed as to permit soldering without bringing heat too close to the comb.

**A SHOULDER PIN** with enameled plaque has a dual personality: it holds milady's shoulder-bag strap in place, while also serving as an attrac-

tive shoulder ornament. The metal base pin may be purchased as is and a copper mounting shaped to fit its face, then soldered or cemented in place. In the case of a flat-pin surface, you may decide to extend the enameled plaque over the sides to disguise the functional purpose of the pin.

**MATCHBOX COVERS** are also welcome gifts. They are slightly more complex, even when enameling is done on separate plaques and attached, because three surface areas are involved. Three small plaques, two of the same size for each of the sides and one for the backbone of the cover, should be cut to fit the surfaces.

You may decide to enamel directly on the cover. Copper covers, in different sizes, may be ordered from several enameling supply houses. When enameling directly, you will want to keep two things in mind:

First, see that the open sides are supported during firing, as a precaution against warpage. Counterenameling must also be done with warpage precautions in mind. Use plenty of agar and sift the counterenamel over the inside top, bottom, and backbone. Then wipe the edges clean all the way around, leaving an inside rim of bare copper about one-quarter of an inch wide.

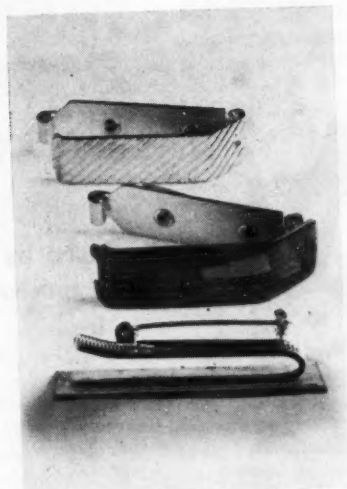
Steel trivets turned on their sides, or pieces of firebrick can then be safely wedged between the two outer corners at each end of the cover, thus giving the piece the needed support during firing. You must be sure, however, that the wedges do not touch the counterenamel, or you may have trouble removing them when the piece comes out of the kiln.

Now we come to the second precaution: run a palette knife along the folded edges of the backbone, inside and out, to scrape off a thin line of the enamel. This device gives the cover the flexibility it needs in order to clasp the matchbox securely.

As usual, your own ingenuity is the only limitation in creating these "little works of art." Your enameling know-how will enable you to turn the ordinary into the extra-ordinary—and your friends will appreciate it! •



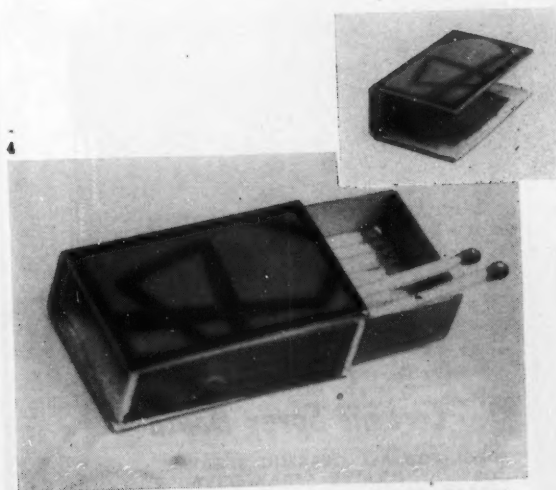
# our Christmas gifts



1



2



1. A functional shoulder-bag pin becomes ornamental. Plaques are fashioned to fit the surface, either curved or flat.
2. Plaques by themselves, decorated on the face and with name and address on back, make useful identification tags.
3. Two rectangular plaques are combined to make one attractive comb-case pattern. One large plaque may be used if copper is properly annealed and planished to prevent warpage.
4. Matchbox covers may be adorned with three separate plaques, or you may enamel directly on a copper cover.

NOW . . . MAKE YOUR OWN

# MOSAIC

## TILE TABLES and MURALS



**FREE**

- ★ Color Chart
- ★ Instruction Sheets
- ★ Price List

We carry everything for mosaic work. Imported Italian and French mosaic tiles and tesserae, brass and wrought iron table frames, legs, mastics, tools and grout.

Wrought Iron Table Frames			Brass Finish (Brass Tipped) Legs—set of 4			Wood Legs (set of 4)		
Rectangular		Circular						
12½x12½	5.50	18" dia.	7.50	6"	6.95	6"	3.95	
18½x18½	8.50	24" dia.	9.50	11"	8.95	12"	4.50	
18½x48½	19.95	30" dia.	12.50	14"	9.95	16"	5.50	
		36" dia.	18.50	16"	11.95	22"	6.50	
				22"	12.95	28"	7.50	

TILES \$1.45 per sheet and up (approx. 1 sq. ft.)  
 SOLID BRASS 1" STRIP .70c ft., drilled w/screw  
 SPECIAL CUTTERS \$1.50-\$2.45 each  
 MOSAIC MASTIC 95c tube, \$1.35 pint, \$2.25 quart  
 MOSAIC TILE GROUT 40c lb.

## illini CERAMIC service

"QUALITY CERAMIC SUPPLIES"

439 N. Wells, Chicago 10, Ill. Phone MI 2-3367



## Portable Ceramic Spray Booth

**IDEAL FOR ALL CERAMIC SPRAY JOBS. ELIMINATES SPRAY DUST, MASKS, TOXIC FUMES. NO OUTSIDE VENT NEEDED**

**FOR ALL CERAMIC HOBBYISTS**  
 Size Open—20" W. 20" H. 23" Deep.  
 Folds for Easy Storage

\*\*\*

Welded steel construction. Green baked enamel finish. Powerful electric fan. Standard size, low cost fiber glass filter. Completely assembled, ready for use.

**ONLY \$34.95**

AT YOUR DEALERS OR  
 F.O.B. FACTORY  
 SH. WGHT. 21 LBS.  
 SEND CHECK OR  
 MONEY ORDER  
 NO C.O.D.'S PLEASE

## DETROIT FABRICATING CORP

7521 ST. AUBIN, DETROIT 11, MICH.

## The Ceramic Show Window of the Nation!

**FIFTH ANNUAL**

# Eastern Ceramic Show

SPONSORED BY:  
CERAMIC LEAGUES, INC.

## OF 1957

**CONVENTION HALL  
ASBURY PARK - NEW JERSEY**

# MAY 4-9

RESERVE YOUR  
EXHIBIT SPACE  
Today!

**Produced by  
Ceramic Expositions,  
Inc.**

Write:  
**Jerry Gasque, Director  
 Convention Hall  
 Asbury Park, N. J.**



## Glowing XMAS TREE WITH PLASTIC LITES

**XMAS TREE MOLD—\$5.00** (Use 7 watt light inside tree)  
 Plus 10% pkg. charge  
 (We suggest 14 lites per tree. Tree is 7½" high)

Lites come in 6 colors and 5 designs: Red, Yellow, Blue, Pink, Green, White. Also available: Phosphorescent lites that will glow long after light in tree is turned out.

**LIST PRICE FOR LITES**  
 10c each  
 15c each for phosphorescent  
 20c each for the tree top star

- No order less than 14 lites ● Dealer rates quoted
- We also sell in gross lots ● Postage paid ● No C.O.D.'s ● No charges ● Check or Money order must accompany order ● California buyers add 4% sales tax

## florence originals

P.O. Box 145, Burbank, Calif.  
 Old friends note our new address



## Answers to Questions

conducted by KEN SMITH

**Q.** I am using a small electric sprayer for applying clear glaze. Even after the glaze has been considerably thinned with water, the sprayer frequently clogs. I have strained the glaze through a fine-wire strainer but still have the same difficulty.

**A.** Even professional-type sprayers will clog if the material is not carefully screened. It takes only one oversize particle to clog a sprayer; screening through a one-hundred-mesh screen, at the least, is highly recommended. Perhaps several thicknesses of nylon stocking will work. Thinning the glaze may help the "spraying pattern" but it will not eliminate coarse particles, which ordinarily cause the difficulty.

**Q.** How do you keep the atomizer used for metal enameling from clogging up with gum?

**A.** If the atomizer is clogged up with gum it means that the gum solution is too thick; make a thinner solution. Always blow clear water through the atomizer after use to rinse it clean.

**Q.** Do you know of any ceramic materials such as underglazes, glazes and clays which can be fired in the home cooking oven?

**A.** No! Ceramic materials must be fired (not baked) to at least a dull red heat, which would not be possible in a kitchen oven. The lowest-temperature glazes mature around cone 022, which is approximately 1100°F.—considerably higher than the temperature required for pies and cakes!

**Q.** I am having trouble with my counterenameling procedure on a small copper bowl. If I counterenamel first it burns off during the enameling of the face of the piece. If I counterenamel after I have done the face the additional firing for the counterenameling affects the values in the design. Is there any opaque substance that can be applied instead of counterenameling?

**A.** Any lacquer or even nail polish can be used to coat the back of a piece to prevent it from tarnishing. On a piece as large as a tray, however, you need a counterenamel to offset the strains set up by the enameling on the face of the piece and to prevent cracking and chipping.

Counterenameling isn't difficult if you follow a few simple rules: use a hard or high-firing color; put it on thick because thin coats will burn out; underfire the counterenamel—in the subsequent firings used for the design on the face of the piece, the counterenamel will become matured.

**Q.** Is there any kind of finish, to use over an underglaze decoration, which will not give as high a gloss as most clear glazes do?

**A.** There are many transparent-matt glazes commercially available. These are definitely non-gloss yet they are completely transparent and allow the entire decoration to show through. Check with one of your local suppliers or write to any of the glaze and underglaze manufacturers for a list of their non-gloss (matt) glazes.

All subscriber inquiries are given individual attention at CM; and, out of the many received, those of general interest are selected for answer in this column. Direct your inquiries to the Questions Editor; please enclose a stamped self-addressed envelope.

# Schools and Studios

Find their best buys  
in Ceramics Supplies  
at a Wholesale House  
like

## S. PAUL WARD, INC.

"The Ceramic Wholesaler of the West"

601 MISSION STREET

SOUTH PASADENA, CALIFORNIA

Tels: SYcamore 9-2131 — RYan 1-3000



**NEVER BEFORE** has a quality,  
**MOTORIZED**, Floor Model  
Potter's wheel -- been offered  
at this **LOW PRICE!**



**NEW MASTER POTTER'S WHEEL**

Exclusive fully enclosed, safe design — no exposed mechanism

Whether amateur or skilled artisan . . . you'll find the smooth motorized operation . . . ease of control in the BIG, all-steel precision built MASTER POTTER'S WHEEL enables you to originate beautiful, distinctive pottery excelling anything you've ever done before.

Massive steel construction completely encloses mechanism to exclude clay and moisture . . . assures operator safety and provides vibration-free performance. Other features ordinarily found only in expensive wheels include: pre-lubricated bronze bearings for quiet, long service, convenient arm rests, adjustable wedging wire, large 18" throwing table with plenty of working space and a removable water cup. 10" throwing head has joggles for easy centering, underside reverses for casting plaster bats.

You have complete hand freedom at all times . . . smooth instant change of speed from 30 to 150 rpm is controlled by a foot pedal. Easy to use, even for handicapped persons. Use any 1/4 HP motor. Standard 1/4 HP motor \$16.95 when purchased with Master Potter's Wheel.

MASTER POTTER'S WHEEL Floor Model, Item 47b,

Wt. 90 lbs. Lists at \$175.00—Factory Price —\$89.95

MASTER POTTER'S WHEEL Bench Model, Item 47a,

Wt. 45 lbs. Lists at \$125.00—Factory price —\$69.95

**10 DAY MONEY BACK GUARANTEE**

MASTER MECHANIC Mfg. Co.

DEPT. 36-P Burlington, Wis.

**\$6495**



**x-acto  
CERAMIC  
TOOLS**

For sgraffito, incising, slab work, template making, shaping, modeling, trimming and clean-up.

**QUALITY:** Finest precision-made scraper points and surgically-sharp knife blades.  
**VERSATILITY:** Slim all-metal handle takes any of 6 scrapers as well as blades.  
**ECONOMY:** Points and blades quickly and easily interchanged or replaced.



**No. 63 Double Set:** 2 handles, 6 points, 2 knife blades . . . \$2.75. Other sets at 75c and \$1.50. Refills available separately.


**x-acto** SEND FOR FLIER—FREE: CATALOG—25c  
48-69 VAN DAM ST., L. I. C. 1, N.Y.

**ENAMELING SUPPLIES  
New York City**

A very large selection of interesting copper stampings at big savings. **SPECIAL:** Copper Cufflink, finest quality, action backs, patented "snap-type" action, a real buy at \$7.00 per gross retail. Retail and Wholesale—catalog available.

**Charles Harris Co.**  
2894 Broadway New York 25, N. Y.

**HOLIDAY SPECIAL**



**6 SWEDISH MODERN MOLDS**  
(including packing charges & freight)  
\$35.00 (east of Miss.—\$30.00)  
No C.O.D.'s please. Catalog 25c

Mold	L	W	H	Price	Vase
206	3 1/2	2 3/4	10	\$5.50	Vase
207	10 3/4	10	4	6.00	Fruit or Salad
203	3 1/2	3 1/4	7	4.50	Vase
201	2 3/4	2 3/4	4 1/4	3.50	Candle
90	5 1/4	4	2 3/4	3.25	Nut
92	9	4	2	4.00	Divided Dish

**Ruth Denise Lauer, Inc.**  
145-04 Jamaica Ave. Jamaica 35, N.Y.

When writing to advertisers  
please mention CM

## Bells

(Continued from page 19)

the pendulum swinging, sound will be produced for quite some time. If the string holding the bell is twisted and then allowed to unwind, the pendulum will swing out and the bell will ring—and ring—and ring—.

I did not take step-by-step pictures of the way I formed my bells because they were made as simply as possible; each was cast from a very simple mold and then altered. The examples shown here are intended merely to stimulate your imagination and give you some ideas for bells that you may never have thought of. Another idea might be to hang strips of hard-fired clay near each other so that they will strike one another and give off a variety of sounds (similar to the Oriental wind chimes made of glass). Or how about two bells with one clapper? Or . . . ?

I hope my bells—though they are only beginning experiments—will entice you into working with shapes, movement and materials to produce sound makers. I know you will not be disappointed with your results, no matter how meager. Your bells will indicate that "here in this house there is happiness and joy." •

Statement of Ownership, Management, and Circulation Required by the Act of Congress of August 24, 1912, as Amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233)

of CERAMICS MONTHLY, published monthly at Athens, Ohio, for October 1, 1956.

1. The names and addresses of the publisher, editor, managing editor, and business manager are:  
Name Address  
Publisher, Professional Publications, Inc. . . . . Columbus, Ohio  
Editor, Louis G. Farber . . . . . Columbus, Ohio  
Managing Editor, Louis G. Farber . . . . . Columbus, Ohio  
Business Mgr., Spencer L. Davis . . . . . Columbus, Ohio

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.)  
Name Address  
Professional Publications, Inc. . . . . Columbus, Ohio  
Louis G. Farber . . . . . Columbus, Ohio  
Spencer L. Davis . . . . . Columbus, Ohio

3. The known bondholders, mortgages, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state) . . . None

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semi-weekly, and triweekly newspapers only.)  
SWORN TO and subscribed before me this 5th day of October, 1955.  
Lew E. WALLACE  
(My commission expires January 9, 1958)  
(Seal)

**BUY A QUALITY PRODUCT**

**Model Kilns**

**TOP OR FRONT LOADING**

**WRITE FOR FREE**

**CATALOG SHOWING 45 MODELS**

770 N. Main St., Akron, O.  
Re-Ward Distributor

**SPUN COPPER BOWLS**, trays or cups. Also—stamped circles or squares, plain or slotted, for belts and links. Also—card, match or cigarette boxes. The Old Viking Shop, 1236 Delaware Street, Denver 4, Colorado.

**WHEN IN FLORIDA**  
come to  
**Sea ramics**  
Complete Ceramic Supplies  
4502 Broadway Tel: VI-4-7206 W. Palm Beach

**LAMP PARTS**  
**FOR MOUNTING & CONVERTING YOUR CERAMICS INTO BEAUTIFUL LAMPS.**  
Send for catalogue  
**Lamp Specialties Co.**  
322 Washington St. Newark 2, N.J.

**TOOLS • CLAYS**

a most complete selection of ceramic—sculpture—casting tools and materials for beginners—students—professionals.—and our own famous

**DELLA ROBBI CLAY**

—bakes ceramic-hard in your kitchen oven in a few minutes; cuts costs to pennies. Send for complete kit CM600, only \$5.95, and free catalogue CM10

**Sculpture House**  
304 WEST 42nd STREET • NEW YORK 36, N. Y.

**AUTOMATIC KILN SHUT-OFF**



**KILN JOY**  
WATCHES OVER YOUR KILN  
Saves time and energy! Rugged, Simple, Reliable—works on cone principle. Guaranteed to shut off kiln automatically. See Your Dealer or Order Direct  
**KILN JOY . . . . \$17.95 PPd.**  
Optional: Warning-Buzzer Kit \$12.95 Ppd.  
**FOLDER ON REQUEST**  
**MASON INSTRUMENT CO.**  
29 ELM AVE., MT. VERNON, N. Y.



## Color and Color Values

### Part 2

by ZENA S. HOLST

This is the concluding portion of the two-part article which began last month.

#### IMPORTED CHOICE

##### (A) REDS

Lipstick Red—very red red  
Brilliant Red—not dark but intense  
Dependable for high temperatures; do not intermix.

##### (B) GREENS

Sevres Green—very soft tint with yellow tinge  
Gray Green—soft grayish tint  
These are *Individual colors*

##### (C) BLUES

\*\*Periwinkle Blue—true blue hue but mellow  
\*\*Dresden Turquoise—rich blue  
Delft Blue—true "delft" color  
\*\*English Cobalt—pure cobalt hue  
English Royal—intense shade with violet tinge  
Any can be intermixed.

##### (D) PINKS

\*\*English Pink—pure pink hue  
Carmine—very dark pink  
It is best to use each in true form to retain the purity of essence.

##### (E) ROSE

\*\*English Rose—pure hue  
\*\*American Beauty—rich shade  
Can be intermixed or lightened with English Pink.

##### (F) RUBIES

Magenta—rich hue  
\*\*Maroon—strong hue  
Roman Purple—intense ruby  
\*\*Ruby Purple—strongest ruby shade  
Can be intermixed; soften with rose colors.

##### (G) VIOLETS

Lavender—very soft tint  
English Tulip—contains blue tinge  
Heliotrope—contains pink tinge  
\*\*French Lilac—rich hue  
Each richest in its own quality.

##### (H) PURPLES

Grape Violet—rich shade with blue tinge  
Pansy Purple—purple shade with ruby tinge  
\*\*Royal Violet—darkest purple shade  
Intermix or add to violets and rubies.

##### (I) BLACK

Purple Black—has a warm cast

##### (J) OTHER INDIVIDUAL COLORS

White Rose—very soft greenish tint  
Satsuma Tint—dark ivory  
Coral—mellow pink with yellow tinge—dependable for high temperature  
Shell Pink—quite pink but delicate

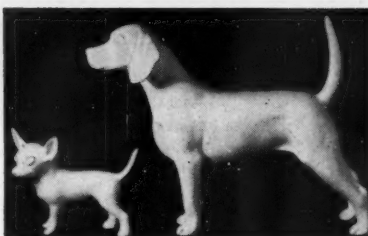
Many colors which I have not listed may be just as good for ordinary purposes or may be added to the palette

to make a larger collection. The many varieties can be bewildering, some of them being so alike as to be practically indistinguishable. For example, Yellow Brown and Meissen Brown are so similar that I have listed only Meissen since it is richer in quality. It is good to remember also that each hue has the capacity of dimensional values in lightness and darkness (even without mixing with another color)—depending how thinly or heavily the color is applied, and on how many applications and firings are given. The richest colors, in the final effect, are obtained by thin washes for successive firings. This is the usual procedure when depth is needed with an intense color; and it is also done to retain the translucent nature of the pigments. Such results cannot be achieved with heavy applications.

Some of the colors available are very vivid, and I have listed only a few of these. Most of them are domestic: they are intended specifically for use on soft clay ware and are seldom needed by the naturalistic painter. In any case, the colors are usually easy to recognize by their names: for example, such reds as Chinese, Flag, Tomato, Christmas, Cranberry, Poinsettia, etc.

The colors which are particularly appropriate for *soft background tints* are: Trenton Ivory, Satsuma Tint, Primrose Yellow, Light Water-green, Yellow Green, Ashes of Roses, Warm Gray, Copenhagen Gray, Air Blue, and Violet of Iron. The choice of shades for backgrounds in naturalistic painting would depend on the component parts of the decoration. The values of the shades would be those reflected from the same colors used in the painting (blues from blue flowers, reds from red flowers, etc.) with variations in softer degrees as affected from diffused light or in darker shades for depth of intensity. Colors which are exceptionally good for ground laying (dry-dusting method) when brilliant conventional motifs are part of the pattern, are: Albert Yellow, Moss Green, Persian Green, Peacock

(Please turn to page 32)



## More New Molds

The Chihuahua Dog and Beagle Hound pictured here are two more of the new molds recently added to our line. Add these to your line now as they will soon be in popular demand. Send \$1.00 today for our catalog (refunded on 1st mold order) and see our other items. Ask your dealer for Ludwig Schmid molds or write us direct.

S-381 Chihuahua Dog  
S-377 Beagle Hound

## LUDWIG SCHMID model and mold shop

838 Genesee Street, Trenton 10, N. J.

## Simply Amazing For Glazing . . .



THE  
BURGESS  
ELECTRIC  
SPRAYER

(Just plug  
in and  
spray away!)

**\$12.95**

Complete—postpaid

**FREE—4 oz. bottle of JANE SNEAD  
glaze with each order.**

Put the finishing touch of the artisan on your pet ceramics with the new Burgess Electric Sprayer . . . its the simple, thorough way to glaze; it beautifies your work. Long, faithful service assured by the jeweled sapphire nozzle of this sprayer . . . pattern and volume regulated by one simple adjustment, which prevents waste, saves you time and money. The lightweight 'Burgess' comes complete, no compressor required. For exactly the job you want . . . it's best to invest in a Burgess Electric Sprayer. Send check or M.O. today! Dealer inquiries invited



**JANE SNEAD  
CERAMIC STUDIO**

170 Elm Street  
Bridgeport 3, Connecticut

# AUTUMN SPECIAL

## NEW TRANSPARENT COPPER ENAMEL LUMPS

RED	PINK
WINE	CLEAR
MIDNIGHT BLUE	ORANGE
EMERALD GREEN	YELLOW
CINNAMON BROWN	AMBER YELLOW
GREEN CHARTREUSE	TURQUOISE BLUE

Your choice one ounce each of any five colors. \$1.75 value for \$1.00 postpaid.

FREE Monel Trivet sent to all inquiries including dealer's name and address.

## TORRANCE GLASS & COLOR WORKS

22922 South Normandie  
Torrance, California

## ESSEX Tile Stackers Make Tile Firing Practical IN STUDIO KILNS

- SAFER: Stackers Interlock Firmly
- MORE COMPACT: Stack up to 14 Tiles in Kiln only 11 inches high.
- BETTER RESULTS: Tapered inner sides prevent glaze sticking. Perfect air circulation.



1 Doz. (3 Sets of 4) . . . \$ 1.85  
4 Doz. (12 Sets of 4) . . . 6.05  
1 Gross (36 Sets of 4) . . . 16.90  
SEND CHECK OR MONEY ORDER  
Prices include delivery charges in U.S.A.

**ESSEX CERAMICS**  
Division of  
**SILAWAY CORPORATION**  
Dept. CM-12 30 Canfield Rd.  
Cedar Grove, N.J.

## Overglazes: Color

(Continued from Page 31)

Green, Meissen Brown, Yellow Red, Sevre Blue, Turquoise Blue, Banding Blue, English Rose, Carmine, American Beauty, and Violet of Gold.

The yellows and reds are the most sensitive colors in retaining purity of essence through the firing, particularly when two or more tints or shades have to be blended together.

There are certain rules of nature to be followed when it comes to deciding what tints and shades of greens to use for the foliage in a naturalistic painting of flowers. Observers will see that nature produces related colors in her compositions. The leaves of blue and lavender blossoms are on the bluish side in the scale of green values. Yellow and red blossoms have much yellow and olive green, with touches of Meissen brown, in the foliage. Shading green is the most comparable green to use for the leaves of white, pink, rose- and ruby-colored flowers and in the foliage of roses in these particular colors there is much red. The thorns, edges of leaves, and new fronds on rose stocks are done in Violet of iron; a reddish brown can be added if the roses tend more to the coral and salmon colors.

Shading Green is a neutral green which can always be used when there is doubt as to the correct green. It is used a great deal for shadow reflections in backgrounds. It is also the very best color for intermixing with other colors to darken the shadow painting in the petals of flowers: it may be mixed, for example, with Pompadour for depth of color when dark Oriental poppies are painted, and it can be added to the rose and ruby colors for darker shades without affecting the purity of the hues. Darkest Green in small proportions is good for mixing with other colors to obtain the very darkest shades. It is not advisable to use pure black for darkening other colors because often it will muddy the colors and result in a dead effect (gray is preferable to black). Peacock Green is Oriental in quality and not considered a complementary color for foliage in any instance. There are no special rules for the blue, pink, rose, ruby and purples: they are compatible with each other.

Beauty in china painting depends on freshness and clearness of the colors. It might be well, therefore, for the reader to review my previous articles on "Pigments" and "Palette of Mineral Colors" (May, June 1954); also, "Know Your Colors" (August, September 1955) •



## Guaranteed Ceramic Supplies for

**SCHOOLS STUDIOS TEACHERS HOBBYISTS**  
Manufacturer's representative for RE-WARD products. Distributor, sub-distributor and dealer inquiries invited.

**OLEVIA CERAMICS**  
Wholesale and Retail  
Phone 3-0476  
152 Conklin Ave., Binghamton, N.Y.

## CLOCK MOVEMENTS

We carry all available sizes clock movements, electric and spring wound, American and Imported. Illustrations and prices on request.

WHOLESALE ONLY

S. FARGOTSTEIN & SONS  
SHRINE BUILDING, MEMPHIS, TENN.

## JAYDARH

A ceramic turquoise stone at cone 07  
A self-glazing, one fire, vitreous body in powder form. Excellent for jewelry or inlay. No special training necessary. Works like clay. Available also in avocado, chartreuse, blue-green and white to be colored to suit. Instructions in package. 4 oz. \$1.00, 1/2 lb. \$1.50, 1 lb. \$2.50; check or money order. Add 15c postage.  
WILTON POTTERY, Sier Hill Rd., Wilton, Conn.

## WROUGHT IRON Tables for Tile

CUSTOM-MADE FRAMES FOR 6x6 CERAMIC TILE, ENAMELED TILE, ETC. MAKE YOUR OWN TABLES! Write today for description and prices.

**HALLAM STUDIO** 1600 Main Street  
Racine, Wisconsin

## SUNKROFT CERAMICS

Exotic Glazes — liquid or dry • U.G. Colors • "Sunkroft" SWIRL colors • Bisque stains • crystals • Professional glaze medium • Clay & Porcelain slips — white or colored • Paragon kilns  
Catalog 10c — Retail & Wholesale —  
DISTRIBUTORS WANTED  
3720 Beach Blvd. (Highway 90)  
JACKSONVILLE 7, FLORIDA

## IMPORTED CHINA SUPPLIES CORRESPONDENCE COURSES

Write for Free Catalogue

## CAMPANA ART CO.

442 N. Wells St. — Chicago 10, Ill.

## The Potter's Wheel

Boston Post Road  
Westport Southport Line  
Westport, Conn.

## Ceramic and Copper Enameling Supplies

Distributor for Re-Ward





## CHRISTMAS IS COMING

Here we are, again, being reminded that it's only so and so many days until Christmas. And all those little remembrances for family and friends still to be enameled. What shall it be this year? Something easy yet *different* and, of course, charming. Here are some ideas which may help you. All of them are "quickies," items which can be made with the greatest of ease.

### Vase for a Single Flower

I'll give you the general idea for a small vase—a very good present—and then you can invent any number of variations on your own. First go to the drugstore or a surgical supply store and get glass test tubes, the kind without lettering and without a beak. From not-too-heavy copper cut a long narrow strip (say an-inch-and-a-half wide). Bend this strip into a symmetrical or free-form rosette, leaving an opening in which to set the test tube. The opening should be small enough to fit the tube closely yet large enough to allow for the thickness of enamel which will cover the holder.

Now enamel the rosette, stick the tube in the center of it—and you have a charming little vase which will hold a single flower. Many variations on this theme will occur to you, I am sure.

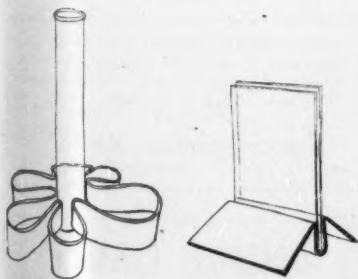


Photo Stand

This stand is for a photo "framed" by placing it between two layers of glass. Make a paper pattern for the stand: cut a strip of paper as wide as the glass; from the center of the strip mark off enough space to hold the glassed-in photo; then allow for two inches in addition at each end of the strip. This will give you a pattern for

a stand which flares out at front and back. Cut a piece of copper according to the pattern. Now make the sharp folds at the two-inch lines by bending the metal over a straightening plate (or some other sharp-edged hard metal block); to make the groove at the center, bend the metal over a rod or pencil.

Enamel the photo stand, decorate it or inscribe it as you like, and presto—another present is born.

### Easy-to-make Necklaces

Usually necklaces are a lot of work but here is a type so easy to make that even the most inexperienced enameler can manage it.

Secure a chain long enough to be wound twice around the neck and



looped at the front. The links of this chain should be large enough so that a wire ring, to hold an enameled ornament, can be attached at either end. The ornaments can be as simple as you please—blanks for dangling earrings, the ones with a hole in them, serve very well. Four blanks of the same shape, for example, can be enameled and hung in pairs at the ends of the chain. This makes a necklace which can be worn choker style or as a single strand with long ends hanging down. Very smart.

Variations of this idea: form three-dimensional pendants by bending a strip of copper in a spiral or in a U shape. Drill a hole in the top of the piece and make a small ring to hang it on the chain. Here, again, there is no limit to the pendant shapes you can work out.

When it comes to enameling any of (Please turn to Page 36)

## It's Here! Our Own Brand NEW KAY HARRISON REDHEAD



### The PERFECT Little Kiln for ALL Copper Enameling

Come in and see it perform miracles for YOU. (Operates on 110 house current.)

**\$7.95**

with Switch Cord \$8.95  
by mail add 70c postage

### Stainless Steel Scrolling Tools

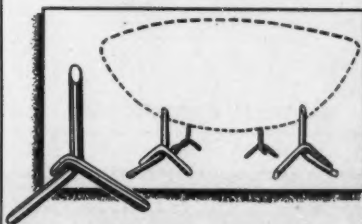
\$2.00 per set, postpaid

Stock up on our mosaic tiles, copper supplies, Velve-Ply One Fire Glazes and top quality ceramic materials and Kilns.

**the Kay Harrison Studios**

8744 W. McNichols, Detroit 21, Mich.  
UNiversity 2-9222

## "SPEEDY SPURS"



### THE MODERN WARE SUPPORTS FOR Ceramics & Enameling

**ONE SIZE** Supports all ware. Universally adjustable. Unbreakable, sturdy, space saving.

**ECONOMICAL** Saves stacking time and costs. Outlasts all other stiltng devices. Re-usable indefinitely.

**IMPROVE YOUR WARE** No more unsightly stilt scars. Eliminates need to dry foot.

## SPEEDY SPURS

Are made of Inconel high temperature wire, welded in a perfect bond, forming tripods with vertical supporting legs, 1/2" overall. See Your Dealer: 60c per dozen—\$7.20 per gross. Special Introductory Offer! Send 50c together with your ceramic supplier's name and address for your trial dozen of new SPEEDY SPURS.

**COLE CERAMIC LABORATORIES**

Dept. C.M. Gay-Way, Sharon, Conn.



**Katjettes**

Made of strong, high fire, flexible, stainless steel. No fire scale. Lasts indefinitely.

Ware holds firmly in place and can be handled or moved without spilling enamels.

Sizes elastic to many shapes by adjusting stilt to fit copper shape before enameling.

Size	Price Each	Price Dozen
3/4"	.15	1.62
1"	.20	2.16
1 1/4"	.25	2.70
1 1/2"	.30	3.24

(Takes a 2 1/4" bowl).  
TRIAL PACK—2 each of size 3/4", 1", and 1 1/4" ..... \$1.00  
\$1.00 minimum order, plus \$.10 postage and handling. Pat. app. for

Cash with order to . . .

**KATJA TUCKER**

20 Franklin Street, East Orange, New Jersey

#### SEELEY'S CERAMIC SERVICE

Let us help you with your ceramic needs. We have a complete line of school supplies and equipment: slips, clays, colors, kilns, wheels, tools, brushes, sprayers, pens, and books. Free catalogues to schools and ceramic teachers: Ceramic-Molds-Copper Enameling.

7 ELM STREET, ONEONTA, NEW YORK

### Ceramics Copper Enameling

Your complete source of materials & equipment. Fully illustrated INSTRUCTIVE CATALOG FREE if requested on school letterhead (others 25c).

**TEPPING STUDIO SUPPLY CO.**

professional staff  
3517D Riverside Dr. Dayton 5, Ohio

### Howe Ceramic Van SUPPLY COMPANY

Midwest's Largest and Most Complete Supply House of Clays, Glazes, Chemicals, Molds, and Equipment. Discounts available to Dealers, Manufacturers and Schools.

Write Dept. 12A for Illustrated Catalogue ..... 50c  
Refunded on first order.

Catalogue sent to schools Free

1248 South Broadway Denver 10, Colorado

### Delicate Ornaments

(Continued from Page 25)

5. Bisque fire the ornament; then glaze (spray or brush on) and refire.

Reinhold Marxhausen's yarn productions prompted CM to consider other possibilities such as using fabric instead of yarn or string as the wrapping material. Mrs. Du McKinley (of McKinley's Ceramic Studio, Columbus, Ohio) agreed to experiment along these lines. Some of her results are also shown on page 25 and here are some of her helpful suggestions.

Follow the same procedure outlined above. When working with fabric, however, try it on the balloon for size before dipping. Cut the fabric, as needed, to fit. Then soak it in thin slip until completely saturated. If holes in the fabric become clogged with slip, simply pat the cloth between your hands to clear it.

Before draping the material, wet the balloon. This will prevent the fabric from drying and sticking immediately, enabling you to move it around to the proper position.

The draping procedure—joining of seams, gathering, folding, etc.—is not as easy as it may appear. Mrs. McKinley found it no challenge because she is an expert in the art of draping fabrics and lace on figurines. For the inexperienced, however, the best results will invariably come from ideas that are not too ambitious.

Since fabrics burn out in the kiln, firing of these ornaments requires special attention. The kiln door or lid should be propped open at least one inch and the peephole should be open. The burning fabric will produce a thick smoke and an odor; the firing, therefore, should be done in front of an exhaust fan if the kiln is not already vented.

When the temperature has reached approximately 1000°F. and the smoke has subsided, the lid can be closed and the firing continued as usual.

The yarn and fabric ornaments shown here are merely suggestions. There are many ways, for example, to add to the decorative effect. Overglaze lusters or gold can be sponged or spattered on. Strips of lace or rick-rack can be applied in a variety of patterns to produce a particularly ornate piece if desired. Another suggestion is to color the slip with underglazes before immersing the yarn or fabric.

Remember that the finished pieces will be extremely fragile. Handle with care—and your delicate creations may become treasured family heirlooms. ●

### World's finest TILES For Decorating

Superb English Tiles, bisque or glazed, 6" x 6", they're perfect for pleasure . . . or profit.

- ALSO AVAILABLE:
- TRIVETS, black iron, rubber-footed, for 1 and 2 tiles
  - WROUGHT IRON FRAMES
  - WOODEN FRAMES
  - TILE BACKS and HANGERS

Write for FREE Descriptive Price List No. C4

**SORIANO CERAMICS, INC.**  
Long Island City 5, N. Y.



**MOLDS BY**

# Sahuaro

exciting . . . new . . . original

watch for our new designs

SEND 25c FOR CATALOG

SAHUARO, BOX 133, STA. A, PALO ALTO, CALIFORNIA

### Jean Leonard Ceramics Distributors

Gloss-Matic, Tru-Fyre, Drakenfeld's, Zircos, L & L Kilns, Kemper Tools  
Try our Magic Glaze binder. Makes one gallon — 50c. Mend-all, (greenware & bisque mender) 4 oz. — 50c. All items plus postage — catalog 25c.  
96-24 Corona Ave. Corona, L.I., New York

### MOLDS only

Molds — Blocks — Cases made to your design. Our catalog 25c  
**PIEPER POTTERY**

324 Passaic Ave., West Caldwell, N.J.

CONTINENTAL PORCELAIN SLIP cone 6 fire body of high green and firing strength. Whitest body on the market with maximum translucency. Colors available. Write for prices. A NEW PORCELAIN SLIP.

**RODER CERAMIC STUDIO**

1831 RACE ST., PHILADELPHIA, PA.

### DOLLMAN CERAMIC SUPPLIES

DISTRIBUTORS . . . . .

PARAGON KILNS TRU-FYRE  
GLOSS-MATIC E-Z FLOW

MARC BELLAIRE PIECES  
ON DISPLAY

1542 Main St. at W. Ferry, Buffalo 9, N.Y.

# Ceram Activities

## people, places & things

### MEET OUR AUTHORS:

■ Clay jingles with the merriment of the Christmas season in **Reinhold Pieper Marxhausen's** unique but functional bells. Marxhausen, an art instructor at Concordia Teachers College, Seward, Nebraska, will be remembered by CM readers for initiating the idea of using balloons as drape molds (April, 1956), and for other CM articles.

As an instructor, he preaches the doctrine of simplicity to his students. "Explore and experiment, see what you can create from the sundry items at hand, but keep it simple!"

His home gives expression to this basic philosophy. Pieces of chicken wire, binder twine and wood have been transformed into a lamp, driftwood is fashioned into candleholders, and a discarded churn becomes useful once more as a wastebasket.

Using his creative talent in quite another field, Marxhausen invents educational toys for children. There seems no end to his constructive imagination. See if you, after reading his article, are not encouraged to follow his "explore, experiment and create" doctrine.



Reinhold Marxhausen



Muriel Anderson

■ **Muriel Anderson** has again combined her knowledge of art with her writing talent to describe Irene Kilmurry's technique of making sculptured pieces in molds. This time Irene's cast creations are *Nativity Sets* which possess both simplicity and dignity.

Formerly Publicity Director and Secretary of the Milwaukee Art Institute, Muriel is the author of other CM articles on Irene's work: creating sculpture from molds (May, 1956) and "Sculpture that Makes You Laugh" (October, 1955). Since Muriel has realized her ambition of being a free-lance writer, she has contributed to other well-known magazines including "Parents" and "Child Life."

■ First and always a designer—of just about anything from baby clothes to flower arrangements to ceramics—**Bee Basch** is currently immersed in the business of making and selling molds. (The idea of designing her own line of molds came after she won a set of molds as first prize for her ceramic sculpture in a hobby show.)

In designing molds, she brings a wide knowledge of glazes and decorating tech-

niques into play. Knowing what will happen, for example, when a particular glaze is applied to a specific design, such as one with a grooved surface, is essential to good mold-making, she feels.

Nature is often the inspiration for design in her firm at Rumson, N.J. Bee, herself, is fascinated by leaves and has a ready source of reference in her gardens at home—no less than 28 different hollies, uncounted varieties of ivy, and a multitude of other plants. (She is an accredited flower-show judge, by the way, and lectures on horticulture as well as ceramics).

Bee is a graduate of the New York School of Fine and Applied Arts, since re-named The Parsons School of Design. "I believe I was born to be a designer," she says. "I like to design everything I come in contact with . . . wear . . . or use." But ceramics is winning out (and the garden needs weeding these days).

■ **Don Wood** does not think of himself as a ceramist, a woodworker or a metalworker—although he creates in all three crafts. He is a designer and design is the subject he teaches as associate professor in the School of Fine Arts at The Ohio State University.

Be that as it may, he is quick to assert that of all the materials he uses it is with clay that he has most FUN; in fact, got his M.A. degree on the strength of his work in ceramics. His pottery has won awards, including a top prize for two wheel-thrown jars at the 1948 Syracuse Ceramic National.

Aside from the fun angle, Don has no preferences in mediums; he uses whatever he needs for the job to be done (designer influence). Master of the wheel, he does not like it better than hand building; again, choice of technique depends on the design in mind. On the other hand, he believes that hand building offers no greater design freedom than does working on the wheel.

Don Wood is a big fellow—6' 3", 220 lbs. The photos you see of him at work on the candelabra are taken by himself. This is how it's done: he gets the potting scene ready, moves out of it to adjust a delayed-release attachment on the camera and then, before it goes off, hurries back to get himself in the picture!

■ Also adapting themselves to the Christmas theme, with hints and "how to's" for the holiday-minded, are our regular contributors, artist-decorator **Marc Bellaire**, and enameling specialists **Kathe Berl** and **Jo Robert**. **Zena Holst** concludes her two-part article, "Color and Color Values," which began last month. **F. Carlton Ball** discusses using kiln wash as grog in the third article of his stoneware series.

(Please turn to page 36)

### CERAMASTONE jewelry mix ... a self-glazing clay

Add water to this magic mud—hand model into earrings, cuff links, pendants, pins, beads, buttons, belts! Fire only once at cone 06. Open your kiln to find beautifully glazed ceramic stones. Used by potters and instructors in all forty-eight States. Ideal for schools and occupational therapy.

Nine dramatic colors: DARK BLUE, TURQUOISE, CHARTREUSE, GUNMETAL, WHITE, BEIGE PINK, PURPLE, SPRING YELLOW & BROWN. Send \$1.00 for generous 1/2-pound portion of one color plus instructions for mixing and firing. Postpaid within Cont. U.S. Colo. Res. add 2% sales tax. Specify colors when ordering.

**NEW — HANDBOOK OF JEWELRY MAKING & DESIGN** featuring CERAMASTONE. 20 pages of instructions and designs! \$1.00 postpaid.

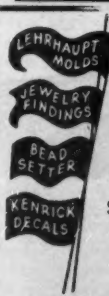
**SPECIAL**—Free Copy of **HANDBOOK** with \$5.00 order for 5 1/2-pound portions of CERAMASTONE. Specify colors.

Joan and Conrad Wilson

### The Pottery Workshop

Cripple Creek, Colorado

### Jewelry Molds you will Admire



These plaster of Paris press molds are excellent for pins, earrings, pendants, bracelet pasteups, buttons, and for adding a decorative touch to greenware. Only \$1.75 each.

L-45 Egyptian Mold  
L-46 Religious Mold  
L-47 Exotic Heads  
L-48 Scroll Pins

Send for our FREE Catalog!

Orders shipped within 24 hrs. of receipt. All molds FOB Asbury Park, N. J. Add 10% for packing, 50c Minimum. No COD's, please.

1000 Wickapeack Drive  
PO Box 345B  
Asbury Park, N.J.

The Lehrhaupts

### BOOKS FOR GIFTS?

Good Idea! Write for your copy of the "Complete List of Books," available free from the CM Book Department.



## NEW—FROM Re-Ward

### "DUL-MAT" GLAZE (not satin) SUPER-1-STROKE

ceramic color  
Write Trinity for Re-Ward  
Ceramic Color Price List.

**Trinity CERAMIC SUPPLY**

100 Howell Street Dallas, Texas  
Telephone PR-7248

### WATERMOUNT DECALS

Our large illustrated catalog .....50c  
SPECIAL—your own State decal 5" x 5" 50c  
Instruction book on How to Apply Lustre  
& Gold .....\$1.00

### MARY GROHS DECALS

One of the largest Decal Houses in the East.  
P.O. Box 34 West Orange, N.J.

New 8 1/2" x 11" Monthly Magazine

### CHINA DECORATOR

In old "Ceramic Studio" style, designs, studies, articles for decorating all ceramics, instructions by artists for beginners, classes and production lines. All subjects. Send your ideas and advertise your studios and products. Subscription \$3.75 per year.

NETTIE E. PILLET

841 Barrows Crt., Pasadena, California

## STONEWARE

Slip-Dry-Plastic

Data sheets on request

Rouse Engineering Co.

300 Third St. Trenton, N.J.

## CERAMICS

Instructions, supplies, Ceramic and  
China Firing, finished and greenware

RE-WARD DISTRIBUTOR

HAZEL HURLEY STUDIO

4803 Prince St., Downers Grove, Ill.  
Phone Woodland 8-0719



Send for your  
**FREE** copy of the latest  
**CRAFTTOOLS CATALOG** of  
ceramic equipment and tools.  
**CRAFTTOOLS, Inc.**

Dept. CM, 408 Broadway, New York 13, N. Y.

## Ceram-Activities

(Continued from Page 35)

HOBBY PROMOTION IN WISCONSIN: A newcomer among ceramic organizations is the Badger Ceramic Association, formed August 26 at Milwaukee. The group was organized "to promote hobby ceramics, unify the distributor and dealer and promote a feeling of good fellowship in the industry," reports Sally Mann, secretary of the new association.

Other officers of the organization are President, Ray Thust, Edgewater Ceramic Shoppe; Vice President, Irene Donahue, Donahue's Hobby House; and Treasurer, Ed King, Castle Ceramics, all of Milwaukee.

Plans are already underway for a hobby ceramics show to be held next April. Membership in the new association is open to all dealers and distributors in the state of Wisconsin. For further information, contact Sally Mann, 6425 West Arthur Ave., Milwaukee 14.

## Enameler's Column

(Continued from Page 33)

the "quickie" items I have been suggesting, I'll give you a tip. You can get off to a fast start (this is the season of hurry, hurry) if you form the base coat by dipping the pieces in slush. Decoration, as much and as intricate as you like, can be added.

At this time when you're planning all the things you're going to make for loved ones, don't forget the Christmas ideas I gave last year ("3-D Christmas Ornaments," Nov. 1955). Remember the starmobile, starburst, angel and animals?

In any case, have fun—and a very Merry pre-Christmas!

## Back Issues of CM

The following back issues of Ceramics Monthly are still available at sixty cents per copy (Ohio residents add 3% sales tax). We pay postage.

1953

July, August, October, December

1954

February, March, April, July, August,  
September, November, December

1955

March, April, May, July, August, Sep-  
tember, October, November, December

1956

February, May, June, July, August,  
September, October

Please send remittance (check or money  
order) with list of back issues desired.

CERAMICS MONTHLY

4175 N. High St.

Columbus, Ohio

## Ceramic

Materials and Equipment

### SPECIAL PREPARED BODIES

Our business has been expanded to in-  
clude all types of clay bodies—varied col-  
ors for slip-casting, throwing and sculpture.  
Cone 06 to 8 (art ware and stoneware).  
Write for special clay sheet.

OUR AIM IS QUALITY

JACK D. WOLFE CO., INC.  
62 Horatio St. N.Y.C., N.Y.  
(WA 4-6019)

Wholesale and Retail

### ADHESIOLYTE

new epoxy adhesive  
Ceramic to metal—Ceramic to wood  
Metal to metal

\$1.25 for 50. applications (25c for small  
sample)

If dealer cannot supply you, send direct.

PATTYPRINT POTTERY

14826 Charlevoix Detroit 15, Mich



P. O. Box 1066 Jacksonville Beach, Fla.

## SCULPTURE CLAY

Red or white cone 06-1. A Minn. clay  
rich in iron. With white grog added gives  
a granite texture to your sculpture. FREE  
—write for fired sample piece and catalog.

Minnesota Clay Company

3458-10th Ave. S., Minneapolis, Minn.

CERAMIC JEWELRY BOOKLET AVAILABLE  
SOON—WATCH OUR AD.

Instruction Greenware  
Custom Firing

BAUMANN'S CERAMIC STUDIO

580 S. Warren Columbus 4, O.  
Tel.: BR 9-5450

CRAFTSMEN! Potter's Wheel is a craft center.  
Our complete line of craft supplies has been select-  
ed and refined during years of actual use in our  
classes! You can order from P.W. by mail—with  
confidence! ★ Request FREE CATALOGS by  
mail. Ceramic and or Enameling Supplies.

POTTER'S WHEEL

11447 Euclid Ave., Dept. CM, Cleveland 6, O.

STABLE #39  
12" high, base  
is 12" x 14"

\$22.50

CHRIST CHILD

#40  
2 3/4" x 4 3/4" x  
1 1/4"

STAR #40  
4 1/2" Long



## CRAMER MOLD SHOP

746 Cherry

Ph. 7349

Fostoria, O.

## Leaves through Seasons

(Continued from page 16)

gests to me the young growth of the first new leaves.

### Summer.

In the summertime the foliage is a medium green with a definite yellow cast. I poured the mold in Anday's slip. After bisque firing, I glazed with *Creek-Turn's Avocado-Green Matt*. I brushed on about four coats, fired to cone 05, and slowly cooled the kiln.

By slow cooling, I mean keeping the kiln at a hot temperature longer by turning on the switches for five minutes every 15 minutes for about an hour and a half after the cone has gone down. I find this gives me a duller matt, and in the art glazes, more and better developed crystals. This gave me both the color and the texture of the real leaf; I felt I couldn't have made a better choice.

### Autumn.

Here is where the fun begins. In early September, the leaves begin to change. The color varies from chartreuse to gold to brown; and, of course, there are combinations and subtle blending of one color with another. I felt that at least four pieces were required to capture the whole cycle.

1. **EARLY AUTUMN:** The predominant color of the foliage for early fall is a soft gold verging on tan. I poured this one in *Lehrhaupts'* white slip, bisque fired, and glazed with *Creek-Turn's Luggage Tan Matt* by brushing on four coats and firing to cone 05. Once again, both the color and texture were right. It might be interesting to try a dark brown glaze on the edges. I would apply the brown glaze to the edges by brushing one coat on top of the Luggage Tan and firing together. I would, of course, first run tests of several browns on the Luggage Tan.

2. **MID-AUTUMN:** Another autumn interpretation which I felt was a particularly happy choice was *Drakenfeld Crystalline Yellow (9X)* on *Anday's* slip. This is one of the glazes that is quite responsive to the chemicals in the clay: on this clay it is lighter in tone than the Luggage Tan, it breaks up on the veins, and it is a very subtle blend of pale gold to light tan. It is an interesting glaze that varies in color, and is best when put on heavily by brushing, since it is sometimes more interesting if you don't apply an even coat.

In particularly heavy spots and in

a high cone 5 firing, crystals form with a suggestion of green. It has the same texture as the real leaf—a soft matt and the unpredictable quality of the leaves themselves as they take on their Autumn coloring.

3. **LATE AUTUMN:** The third one was poured in *Specialized Ceramics' Whitemix* and bisque fired. It was glazed with *Duncan's Rusty Amber*. This is a good choice for any Autumn leaf. The mutation of tones of amber gold and rusty terra cotta are the very essence of fall. (This is a fairly glossy glaze.)

4. **LAST OF AUTUMN:** The fourth one was poured in *Lehrhaupts'* slip and glazed in *Willoughby's Modern Trend Kopar Jasper*. This is another truly Autumn glaze. It is the color of the leaf after it falls to the ground—very dark brown in color, with amber gold along the veins. It, too, is a glossy glaze, but it is reminiscent of the leaves on a rainy day.

Unfortunately, the glaze crazed on this slip. I have since tested it on other clays, however; it was extremely beautiful when fired at cone 04 on *Byrnes* slip—full of crystals and with quite a bit of copper color in a color blend of amber gold to brown. The color is almost the same when used on *Specialized Ceramics Whitemix*, and so far shows no sign of crazing.

Most of this work was done at the wrong time of year; I had only my memory of the colors to work with. This Autumn, knowing that the Witchhazel was beginning to change color, I went out and picked several; and continued to observe and pick more leaves as the days went by. My ceramic interpretation seems good; I am glad I chose these glazes.

The real leaves, however, suggested additional variations that might add interest to my collection. There is one that could start with a yellow base—such as *George Fetzer's Yellow Matt*. On this I would sponge on a thin coat of *Willoughby's Black Pearl*, very lightly in the center of the leaf. On yellow this will give a soft, light yellow-green very near in color to *Pemco's Bronze Green*. For still another variation, I suggest the same combination, but this time add just a very faint trace of the *Black Pearl*. To this I would add a copper-colored brown on the tip, at the edges, and along each vein.

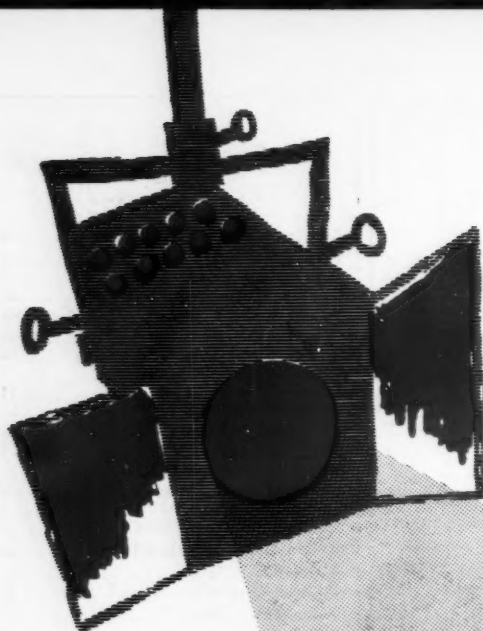
It seems as though one could go on and on. Nature is full of inspiration for all of us. It is a real challenge, but lots of fun to tackle a project like this one. I hope you'll do it, too, and have as much fun and satisfaction as I have had. •

## Advertisers Index

November 1956

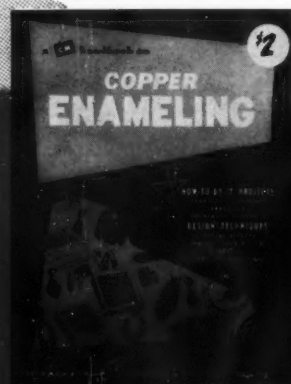
American Art Clay Co.	8
B and I Mfg. Co.	2
Basch, Bee, Designs	7
Baumann's Ceramic Studio	36
Bergen Arts & Crafts	Cover-2
Campana Art Co.	32
Ceramicchrome Laboratories	4
Cole Ceramic Laboratories	33
Copper Shop, the	11
Cramer Molds	36
Creek-Turn Pottery	9
Delta Brush Mfg. Corp.	Cover-2
Detroit Fabricating Corp.	28
Dollman Ceramic Supplies	34
Drakenfeld & Co., Inc.	9
Duncan Ceramic Products, Inc.	7
Eastern Ceramic Hobby Show	28
Fargotstein & Sons	32
Florence Originals	28
Grohs, Mary, Decals	36
Hallam Studio	32
Harris, Charles, Co.	30
Harrison, the Kay, Studios	33
Harrop Ceramic Service Co.	6
Holland Mold Shop	11
House of Ceramics	7
Hurley, Hazel, Studio	36
Illini Ceramic Service	28
Kiln-Gard	36
L and L Mfg. Co.	5
Lamp Specialties Co.	30
Lauer, Ruth D., Inc.	30
Lehrhaupts, the	35
Leonard, Jean, Ceramics	34
Mason Instrument Co.	30
Master Mechanic Mfg. Co.	29
Mayco Colors, Inc.	2
Minnesota Clay Co.	36
Model Ceramics	30
Norwest Novelty Co.	11
Old Viking Shop, the	30
Olevia Ceramics	32
Orton Foundation	10
Pattyprint Pottery	36
Pieper Pottery	34
Pillet, Nettie E.	36
Potter's Wheel	36
Potter's Wheel, the	32
Pottery Workshop, the	35
Re-Ward	1
Roder Ceramic Studio	34
Rouse Engineering Co.	36
Sahuaro Molds	34
Schmid, Ludwig, Molds	31
Sculpture House	30
Sea ramics	30
Seeley's Ceramic Service	34
Silaway Corporation	32
Snead, Jane, Ceramic Studio	31
Soriano Ceramics, Inc.	34
Specialized Ceramics Corp.	2
Sunkroft Ceramics	32
Tepping Studio Supply Co.	34
Thompson, Thomas C., Co.	3
Tiffany, Inc.	12
Torrance Glass & Color Works	32
Trinity Ceramic Supply	36
Tucker, Katja	34
Van Howe Ceramic Supply Co.	34
Walmer's Ceramics	9
Ward, S. Paul, Inc.	29
Wilton Pottery	32
Wolfe, Jack D., Co., Inc.	36
X-acto Inc.	30

Patronize CM Advertisers



It's in the national  
*spotlight!*

## The CM Handbook on Copper Enameling



**64 Pages of Instruction ★ Over 200 Illustrations ★ Completely Indexed ★ 8½ x 11 Format**

The articles on copper enameling by Jean O'Hara and by Jo Rebert appearing in CM since June 1954 have been proclaimed the best in basic instruction. Twenty-one of these articles, representing basic fundamentals as well as illustrated how-to-do-its on jewelry, have now been combined in book form and carefully indexed.

The publishers are proud to present this material under one cover as a service to teachers, hobbyists, and

students. The step-by-step projects in this volume make it an excellent working handbook; the text and detailed index make it a valuable source of reference.

### CONTENTS

Let's Get Started  
Tools and Equipment  
All About the Enamels  
Sift and Stencil Method  
Wet Inlay Method  
Gold and Silver Foil  
How to Get Special Effects  
Defects—Causes and Cures  
Designing with Bits of Foil  
Modern Cloisonne  
Lines for Designs

Copper-Wire Accents  
Fitted Necklaces  
Wireless Cloisonne  
Jewels from Broken Glass  
Jewels Plus Foil  
Plaques for Compacts  
Mobile Earrings  
Simple Link Bracelets  
3-D Bracelets  
Pieces Make Large Plaques  
Index

CERAMICS MONTHLY BOOK DEPT.  
4175 N. HIGH ST., COLUMBUS, OHIO

Please send me \_\_\_\_\_ copies of the **COPPER ENAMELING**  
Handbook @ \$2 per copy. (CM pays postage).

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZN \_\_\_\_\_ STATE \_\_\_\_\_

Ohio Residents: add 6c Sales Tax per copy.

I enclose ☐ Check ☐ Money order \_\_\_\_\_ Other \_\_\_\_\_

**only \$2 ORDER TODAY**

Dealers Write for Information